



EDWARD GOODMAN
PRINCETON, N. J.

—All the ground up — the first thing

PIERCE

August 1st 1888



11. 5. 365





VICTORIA TOWER, WESTMINSTER.

HISTORY
OF THE
MODERN STYLES OF ARCHITECTURE:

BEING A SEQUEL TO THE HANDBOOK OF ARCHITECTURE.

BY JAMES FERGUSSON,
FELLOW OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.



Ruhms-halle, near Munich

WITH 312 ILLUSTRATIONS.



LONDON:
JOHN MURRAY, ALBEMARLE STREET.
1862.

The right of Translation is reserved.

Works by the same Author.

THE ILLUSTRATED HANDBOOK OF ARCHITECTURE: being a Concise and Popular Account of the different Styles of Architecture prevailing in all Ages and Countries. With 330 Illustrations. 2 vols. 8vo. 36s. London, Murray, 1855.

ILLUSTRATIONS OF THE ROCK-CUT TEMPLES OF INDIA. With 18 Plates in Tinted Lithography, folio; with a Volume of Text 8vo., Plans, &c. 2l. 7s. 6d. London, Weale, 1845.

PICTURESQUE ILLUSTRATIONS OF ANCIENT ARCHITECTURE IN HINDOOSTAN. 24 Plates in Coloured Lithography, with Plans, Woodcuts, and explanatory Text, &c. 4l. 4s. London, Hogarth, 1847. *

AN ESSAY ON THE ANCIENT TOPOGRAPHY OF JERUSALEM: with restored Plans of the Temple, and with Plans, Sections, and Details of the Church built by Constantine the Great over the Holy Sepulchre, now known as the Mosque of Omar. 16s., or 21s. half Russia. London, Weale, 1847.

NOTES ON THE SITE OF THE HOLY SEPULCHRE AT JERUSALEM. Being an Answer to the 'Edinburgh Review,' of Oct. 1860. 8vo. 2s. 6d. London, Murray, 1861.

THE PALACES OF NINEVEH AND PERSEPOLIS RESTORED; An Essay on Ancient Assyrian and Persian Architecture. With Illustrations. 8vo. 16s. London, Murray, 1851.

THE MAUSOLEUM OF HALICARNASSUS RESTORED, IN CONFORMITY WITH THE REMAINS RECENTLY DISCOVERED. With Plates. 4to. 7s. 6d. London, Murray, 1852.

AN HISTORICAL INQUIRY INTO THE TRUE PRINCIPLES OF BEAUTY IN ART, more especially with reference to Architecture. Royal 8vo. 31s. 6d. London, Longmans, 1849.

OBSERVATIONS ON THE BRITISH MUSEUM, NATIONAL GALLERY, AND NATIONAL RECORD OFFICE; with Suggestions for their Improvement. 8vo. London, Weale, 1849.

AN ESSAY ON A PROPOSED NEW SYSTEM OF FORTIFICATION, with Hints for its Application to our National Defences. 12s. 6d. London, Weale, 1849.

THE PERIL OF PORTSMOUTH. FRENCH FLEETS AND ENGLISH FORTS. With a Plan. Third Edition. 3s. London, Murray, 1853.

PORTSMOUTH PROTECTED; A SEQUEL TO THE 'PERIL OF PORTSMOUTH.' With Notes on Sebastopol and other Sieges during the Present War. With Plans and Woodcuts. 8vo. 3s. 6d. London, Murray, 1856.

P R E F A C E.

WHEN the 'Handbook of Architecture' was first published in two volumes in 1855, it was intended that it should have been followed by a third, completing the history of the art from the earliest day to the present time. Various engagements and occupations have hitherto prevented this intention from being carried into effect, and the concluding portion of the work is in consequence now given to the public in such a form that it may either be bound up as the third volume of the 'Handbook,' or treated as an entirely separate work complete in itself.

Even independently of the lapse of time which has occurred since the first publication, the nature of the subject demands a different class of treatment from that pursued in the earlier portions of the History. For reasons explained in the Introduction to this volume, it is no longer possible to treat it as the consecutive history of an important art, carried out in every part of the globe on the same well-understood and universally acknowledged principles. Extraneous matters and individual tastes and caprices have been imported into the practice of the art to such an extent that it is at every page necessary to stop to explain and guard against them; and this volume in consequence becomes far more a critical essay on the history of the aberrations of the art during the last four centuries than a narrative of an inevitable sequence of events, as was the case in the previous parts of the work.

Notwithstanding this, the mode of treatment is the same as nearly as was practicable with such different materials, in order that the whole might form one work; so that, except the essential distinction between the principles on which the ancient and modern styles are carried out, there is little change beyond a slight variation in the nature of the illustrations. These are generally of a much more pictorial character than those of the former volumes, the object being to reproduce the stone picture as conceived in the mind of an individual artist, not to trace the gradual development of a quasi-natural

art. In consequence of this, there are fewer plans than in the 'Hand-book,' and a smaller number of purely architectural illustrations.¹

Where plans of churches and other similar buildings are introduced which admit of comparison with those engraved for the previous volumes, they are all reduced to the same scale of 100 feet to 1 inch, but this has been impossible with palaces and many civil edifices, their extent being such as to require a space of three or four times the size of a page of this volume for their display; and the dimensions even of many of the churches are such that it has been found impracticable, from the same cause, to adhere to the scale of 50 feet to 1 inch for elevations and sections, as was the case in the previous volumes. This is of infinitely less importance here than it would have been when speaking of the true styles, inasmuch as the plans of Renaissance churches are seldom interesting as developments of any system, and those of civil buildings are rarely of any value beyond showing the general dimensions of the edifice, while in palaces and dwelling-houses, unless the plans of two or three stories are given, the whole is unintelligible. Even when this is done, their complicated and utilitarian arrangements can never compete in interest with the great internal halls of temples or churches, which are often quite as artistic and as monumental as the exteriors of the buildings which contain them.

It need, perhaps, hardly be mentioned that the present work by no means pretends to be a complete history of the Renaissance styles. So numerous are the examples, that it would require three or four volumes to describe them all, and more than a corresponding increase in illustrations to render them intelligible. All that has been attempted has been to select the best and most typical specimens in each country, and these only; and by means of them to point out the peculiarities and to explain the aims of each separate nationality; while, as a general rule, only such buildings have been described at length as have been also illustrated by the woodcuts. It would, of course, have been easy to enlarge the text to almost any extent by enumerating or describing other examples; but as nothing can be more unintelligible than a mere verbal description of a building, this has, as far as possible, been avoided, and all that has been aimed at is to assign to the buildings of the Renaissance styles the same relative importance and amount of space as was given to those of the true styles in the previous volumes.

¹ All the illustrations engraved for this volume were executed by Mr. James Cooper, and will be found worthy of the high character of his establishment.

A work of this extent, and with illustrations of the size here adopted, cannot make any pretensions to be considered as a scientific treatise in the ordinary acceptance of the term; great pains have therefore been taken to avoid all technical terms or expressions which might be unintelligible to the general reader. But the word "Order" occurs so often, and is used throughout in so technical a manner, that it may be useful to define exactly in what sense it is employed. The ancients generally grouped their different styles of ornamentation into three classes: the Doric, or that used by the pure Hellenic, or Dorian Greeks; the Ionic, used by the Asiatic Greeks, and by the Pelasgi, or Arcadians, in Greece; and lastly, the Corinthian, which, though probably invented or borrowed from the Egyptians by the Greeks, was the Roman Order *par excellence*. The two first were also used at Rome, but with considerable modifications, which, however, were anything but improvements; and the Italian Systematists of the sixteenth century added the Tuscan, which they erroneously assumed to be only a simpler form of Doric, and the Composite, which was only one of the hundred modifications of the Corinthian Order as employed by the Romans. Palladio, Vignola, and others of that school, fixed the dimensions, the forms and details of these five Orders, by laws which have since that time been considered immutable. In consequence of this, when speaking of an Order in this work, it will always be understood

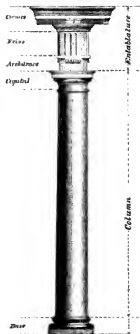


Diagram explaining the parts of an "Order."

as referring to one of these five classes as defined by the architects of the sixteenth century. In the sense in which it is here used, an Order always consists of two principal parts,—a vertical column and a horizontal entablature. The column always consists of three parts,—a base, a shaft, and a capital. The entablature, in like manner, always includes an architrave, a frieze, and a cornice. To these the Italians often added a pedestal below and a balustrade above, but these are not parts of the "Order," which is always understood to include only the six parts first mentioned.

It may add to the clearness of what follows, if before concluding I add one word regarding the position assigned to Mediæval Art in this and the earlier work, though it may appear to be more personal to myself than is quite desirable. When the first two volumes were published, it was objected that I did not appreciate and consequently did not admire the Mediæval styles. If the question were only personal, it might be sufficient to reply that a lifetime devoted to their study, which might in the ordinary sense of the term have been far more profitably employed, ought to be a sufficient answer to that accusation. But the case as I understand it may be more clearly stated thus:—No work of human hands is perfect, while it is also true that few honestly elaborated productions of man's intellect are without some peculiar merit of their own; and on comparing one with the other, it seems as impossible to overlook the merits of the one as to avoid noticing the imperfections of the other. There are few, for instance, but will admit that the Greek style of Architecture possesses a certain purity, an elegance, and a technic perfection, which are wholly wanting in the Gothic. The latter may be infinitely more varied or richer in effects; more poetie; more sublime, perhaps—that is not the question—each has merits of its own: but the man who sees no beauty in the one style, and is blind to the imperfections of the other, is a partisan, and not a historian of the art, and looks at the subject from a totally different point of view from that to which I have always aspired to attain. While admiring, however, the true Mediæval Art with the intensest enthusiasm, I cannot without regret see so much talent employed and so much money wasted in producing imitations of it, which, though Gothic in outward appearance, are erected in utter defiance of every principle of Gothic Art. Neither can I look without extreme sorrow on the obliteration of everything that is truthful or worthy of study in our noble cathedrals or beautiful parish churches; nor do I care to refrain from expressing my dissent from the system which is producing these deplorable results.

If the question is raised which style is most suited to our present purposes? that is a different matter altogether, on which it is not necessary to enter here, as my views on that subject are sufficiently explained in the body of the work; but I must be allowed to express a hope that no architect or section of architects will consider that there is anything in the remotest degree personal in any expression in this volume. My conviction is that the architects of the present day have shown themselves thoroughly competent to the task they have undertaken, and would prove equally so to any other that can be proposed

to them; and if they were allowed to exercise their intellects, and not forced to trust only to their memories, they might do something of which we should have cause to be proud: but they are working on a wrong system and from false premises, so that success seems to me impossible. Still, if the Gothic architects would call themselves "Archæologists," and the Grecians "Scholars," I would bow with due respect to their science or their learning; but though they might produce temples that would deceive Ictinus, or churches that would mystify a Wickham or a Waynflete, that would not alter the state of the case; for I deny that either Archæology or Scholarship, is Architecture according to any reasonable definition of the term, or consequently that their reproductions have any claim to be treated as specimens of that art in a work especially dedicated to the Esthetic development of the Art of Building.

There is another aspect of the question which in many respects is more sorrowful than even this. In their inconsiderate zeal for Mediaeval Art, the Archæologists are fast obliterating all traces of the science they so zealously cultivate. Thirty or forty years ago, if you entered a cathedral in France or England, you at once could say, These arches were built in the age of the Conqueror—that capital belongs to the earlier Henrys—that window tracery must have been executed during the reign of the first or second Edward; or that vault during the Tudor period, and so on. Not only could you fix a date on every part and every detail, but you could read in them the feelings and aspirations that influenced the priest who ordered, or the builder or carver who executed them. All this is now changed. You enter a cathedral and admire some iron-work so rude you are sure it must be old, but which your guide informs you has just been put up by Smith of Coventry. You see some carved monsters so uncouth that no modern imagination could conceive them—"Brown of Cambridge, Sir;"—some painted glass so badly drawn and so crudely coloured, it must be old—"Jones of Newcastle." You decipher with difficulty the archaic inscription on some monumental brass, and are startled to find it ending in "A.D. 1862;" and so on through the whole church. It is so easy for people who have attained a superior degree of proficiency to imitate the arts of those of a lower stage, that the forgeries are perfect and absolutely undetectable. With a higher class of Art this would be impossible; but the great recommendation of Gothic Art is, that it is so rude that any journeyman can succeed in imitating it; and they have done so till all our grand old buildings are clothed in falsehood, while all our new buildings aim only at

deceiving. If this is to continue, Architecture in England is not worth writing about; but it is principally in the hope that a clear exposition of the mistaken system on which the art is now practised may lead to some amelioration that this work has been written. How far it may be successful depends on those who read it, or from its study may be led to perceive how false and mistaken the principles are on which modern Architecture is based, and how easy, on the contrary, it would be to succeed if we were only content to follow in the same path which has led to perfection in all countries of the world and in all ages preceding that to which the history contained in this volume extends.

CONTENTS.

INTRODUCTION.

CHAP.	PAGE
Revival of Classical Literature — Reformation in Religion — Painting and Sculpture — Technic and Phonetic forms of Art — Examples — Ethnography — Conclusion	1

BOOK I.—ITALY.

I.—ECCLESIASTICAL. Churches anterior to St. Peter's — St. Peter's — Churches subsequent to St. Peter's — Domical churches — Basilican churches: Exteriors; Interiors	39
II.—SECULAR. Florence — Venice — Rome — Vicenza — Genoa — Mantua — Milan — Turin, Naples, &c. — Conclusion	82

BOOK II.—SPAIN AND PORTUGAL.

SPAIN. Ecclesiastical — The Escorial — Secular	131
PORTUGAL	159

BOOK III.—FRANCE.

Introduction	161
I.—ECCLESIASTICAL. Renaissance — Revival	166
II.—STYLE OF FRANCIS I. Renaissance — The Louvre — Châteaux	183
III.—STYLE OF HENRY IV.	201
IV.—STYLE OF LOUIS XIV. Versailles — Louvre — Hotels	207
V.—STYLE OF THE EMPIRE. Domestic — Trophies and Tombs — Conclusion	223

BOOK IV.—ENGLAND.

Introduction	242
I.—TRANSITION STYLE	246
II.—RENAISSANCE. Inigo Jones — Wren	256
III.—EIGHTEENTH CENTURY	282
IV.—CLASSICAL REVIVAL	297
V.—GOTHIC REVIVAL	313

BOOK V.—GERMANY.

Introduction	330
I.—RENAISSANCE. Ecclesiastical — Secular	332
II.—REVIVAL. Ecclesiastical, Munich — Walhalla — Secular, Munich — Berlin — Dresden — Vienna — Berne	342

<u>BOOK VI.—NORTH-WESTERN EUROPE.</u>	
<u>CHAP.</u>	<u>PAGE</u>
<u>Belgium — Holland — Denmark — Hamburgh — Sweden and Norway ..</u>	<u>368</u>
 <u>BOOK VII.—RUSSIA.</u>	
<u>Introduction — Ecclesiastical — Secular — Revival</u>	<u>380</u>
 <u>BOOK VIII.—INDIA AND TURKEY.</u>	
<u>I.—INDIA. Portuguese — Spaniards, Dutch, and French — English —</u>	
<u>Calcutta — Native Architecture</u>	<u>408</u>
<u>II.—TURKEY. Palaces</u>	<u>423</u>
 <u>BOOK IX.—AMERICA.</u>	
<u>Mexico — Peru — North America — Washington — Ecclesiastical ..</u>	<u>431</u>
 <u>BOOK X.—THEATRES.</u>	
<u>Construction of Modern Theatres — Lyric Theatres — Dramatic Theatres</u>	
<u>— Music Halls</u>	<u>446</u>
 <u>BOOK XI.—CIVIL AND MILITARY ENGINEERING.</u>	
<u>Bridges and Railway Stations — Ferro-Vitreous Art — Military En-</u>	
<u>gineering</u>	<u>474</u>
 <u>CONCLUSION</u>	 <u>488</u>
 <u>APPENDIX.</u>	
<u>ETHNOLOGY FROM AN ARCHITECTURAL POINT OF VIEW.</u>	
<u>INTRODUCTION</u>	<u>493</u>
<u>I.—TURANIAN. Religion of the Turanians — Government — Morals — Lite-</u>	
<u>— rature — Arts — Sciences</u>	<u>501</u>
<u>II.—SEMITIC. Religion — Government — Morals — Literature — Arts —</u>	
<u>— Sciences</u>	<u>508</u>
<u>III.—CELTIC. Religion — Government — Morals — Literature — Arts —</u>	
<u>— Sciences</u>	<u>514</u>
<u>IV.—ARYAN. Religion — Government — Morals — Literature — Art —</u>	
<u>— Sciences</u>	<u>519</u>
<u>CONCLUSION</u>	<u>527</u>
 <u>INDEX</u>	 <u>529</u>

LIST OF ILLUSTRATIONS.

Victoria Tower, Westminster Frontispiece.

NO.	PAGE	NO.	PAGE
1. Sistine Chapel, Rome	12	40. Church of Sta. Maria Zobenico, Venice	77
2. King's College Chapel, Cambridge	13	41. Interior of San Giorgio Maggiore, Venice	76
3. Fragment from the Pellegrini Chapel, Verona	17	42. Plan of Church of Redentore, Venice	79
4. House in the Griefswald	25	43. Plan of Sta. Annunciata at Genoa	79
5. House at Brunswick	26	44. View of the Interior of the Church of Sta. Annunciata, Genoa	80
6. Grimani Palace	27	45. Elevation of part of the Façade of Riccardi Palace, Florence	84
7. Valmarina Palace, Vicenza	28	46. Section of Riccardi Palace, Florence	84
8. New Cathedral at Boulogne	30	47. Cornice of Pitti Palace, Florence	85
9. Plan of Church at Moustà	32	48. Part of the Façade of the Rucellai Palace, Florence	86
10. Section of Church at Moustà	32	49. Gundagni Palace, Florence	88
11. View of Church at Moustà	33	50. North-Eastern Angle of Courtyard in Doge's Palace, Venice	91
12. Plan of Santo Spirito, Florence	41	51. Vasdraini Palace, Venice	93
13. Section of part of Church of Santo Spirito, Florence	42	52. End Elevation of Palazzo Camerlinghi, Venice	94
14. View of the Church of St. Francesco at Rimini	43	53. End Elevation of Library of St. Mark, Venice	96
15. Plan of St. Andrea at Mantua	44	54. Pesaro Palace, Venice	98
16. Section of St. Andrea at Mantua	45	55. Part of the Façade of the Cancellaria at Rome	102
17. Elevation of Porch of St. Andrea at Mantua	45	56. Block Plan of the Farnese Palace at Rome	104
18. Plan of Church at Lodi	46	57. Front of the Farnese Palace, Rome	105
19. Section of Church at Lodi	47	58. Museum in the Capitol at Rome	106
20. Elevation of Church at Lodi	48	59. Villa of Pope Julius, near Rome	108
21. Santa Maria delle Grazie, Milan	49	60. Plan of the Palace of Caprarola	109
22. View of Western Façade of the Certosa, near Pavia	51	61. Palace of Caprarola, near Rome	109
23. Plan of St. Peter's as proposed by Bramante	53	62. Façade of the Collegio della Sapienza	110
24. Plan of St. Peter's as proposed by San Gallo	55	63. Cortile of the Borghese Palace	111
25. Elevation of East Front of St. Peter's according to San Gallo's design	56	64. View of the Barberini Palace, Rome	112
26. Diagram suggesting arrangement of aisles in San Gallo's elevation	57	65. Part of Façade of the Tiene Palace, Vicenza	113
27. Plan of St. Peter's as it now exists	58	66. Elevation of Chiericotti Palace, Vicenza	114
28. Elevation of the Western Apse of St. Peter's	60	67. Barbarano Palace, Vicenza	115
29. East Front of St. Peter's	61	68. Villa dei Capra, near Vicenza	116
30. Section of St. Peter's	63	69. End Elevation of Basilica at Vicenza	117
31. View of the lateral Porch of San Giovanni Laterano	66	70. Durazzo Palace, Genoa	120
32. Principal Façade of the Church of San Giovanni Laterano	67	71. Tursi Doria Palace, Genoa	120
33. Plan of the Church delle Salute at Venice	68	72. Part of Façade of Carega Palace, Genoa	121
34. View of the Dogana and Church delle Salute	69	73. Little Brignola Palace, Genoa	123
35. Elevation of principal Façade of the Church of Curigiano at Genoa	70	74. Great Court of the Hospital at Milan	125
36. Church of St. Carlo at Milan	72	75. Portion of the Façade of the Palace of the Caserta at Naples	126
37. Church of San Zaccaria, Venice	73	76. Plan of the Cathedral at Granada	134
38. Church of the Redentore	74	77. Capital of Cathedral at Jaen	135
39. Church of San Giorgio Maggiore, Venice	75	78. Puerta de las Cadenas, Cathedral of Malaga	136
		79. Plan of the Cathedral at Valladolid	137

NO.	PAGE	NO.	PAGE
80. Plan of the Cathedral del Pilar at Zaragoza	138	124. Central Pavilion of the Tuileries, as designed by De Lorme	202
81. View of the Cathedral del Pilar at Zaragoza	139	125. Portion of the Façade of the Château Gaillon	203
82. Tower of the Seo, Zaragoza	140	126. Pavilion Flore of the Tuileries, and part of the Gallery of the Louvre ..	204
83. Plan of the Escorial	142	127. Plan of the Luxembourg	205
84. Bird's-eye View of the Escorial ..	143	128. Elevation of a portion of the Courtyard of the Luxembourg ..	206
85. Section through the Church and Atrium of the Escorial	144	129. Part of the Château de Blois	208
86. Court of the Archiepiscopal Palace at Alcala de los Henerares	148	130. Plan of Versailles as it now exists ..	209
87. Paranimfo, Alcala	149	131. Section of Great Gallery and part Elevation of central block, Versailles	210
88. View in the Cloister at Lupiana ..	150	132. Eastern Façade of the Louvre, Paris ..	214
89. Court in the Palace of the Infanta at Zaragoza	151	133. Plan of Façade of Louvre	214
90. Plan of the Palace of Charles V. in the Alhambra	152	134. Central Compartment, Northern Façade of Louvre	215
91. Part Elevation, part Section, of the Palace of Charles V. at Granada	153	135. Château de Meudon, Garden Front ..	216
92. View of the external Façade of the Alcázar at Toledo	154	136. Château de Maisons near Paris ..	216
93. View of the Palace at Madrid	155	137. Façade of the Hôtel Soubise	217
94. The Museo at Madrid	156	138. Hôtel de Nonilles	218
95. Carrel del Corté at Baeza	157	139. Louis Quatorze style of Decoration ..	220
96. Palace at Mafra	160	140. Louis Quatorze Decoration	221
97. Façade of the Cathedral at Dijon ..	163	141. View of the Bourse, Paris	224
98. Plan of St. Eustache, Paris	166	142. View of the Angle of the Cour Napoléon, new buildings of Louvre	227
99. Bay of St. Eustache	167	143. Angle of the Library of Ste. Geneviève, Paris	228
100. Part of Façade of Church of St. Paul and St. Louis, Paris	168	144. New Bourse, Lyons	229
101. Jesuit style of decoration	169	145. Custom-house, Rouen	230
102. Plan of the Dome of the Invalides at Paris	170	146. House, Rue Soufflot	231
103. Section of Dome of Invalides at Paris	171	147. Rue des Saussaies	232
104. Façade of the Dome of the Invalides at Paris	172	148. House, Rue Navarin	233
105. Façade of St. Sulpice, Paris, as originally designed	174	149. Colonne de Juillet, on the site of the Bastille	234
106. Plan of the Porch of St. Sulpice ..	174	150. Porte St. Denis	236
107. Plan of the Pantheon at Paris	176	151. Elevation of the Arc de l'Etoile ..	237
108. Section of the Dome of the Pantheon at Paris	177	152. Entrance to the Ecole Polytechnique	238
109. View of the West Front of the Pantheon at Paris	178	153. Gato of Honour, Caius College, Cambridge	247
110. Pier supporting Dome of Pantheon ..	179	154. Court of Clare College	248
111. Plan of the Madeleine at Paris ..	181	155. Plan of Longleat House	249
112. Plan of the Louvre and Tuileries, distinguishing the periods at which the various parts have been completed	186	156. Elevation of part of Longleat ..	250
113. Pavillon de l'Horloge and part of Louvre Court	187	157. View of Wollaton House	251
114. Part of the Court of the Louvre ..	188	158. Gateway of Heriot's Hospital ..	253
115. Plan of Château de Chambord	190	159. Window-head Ornament	254
116. Château de Chambord	191	160. Pilaster Ornaments	254
117. Château de Madrid	192	161. Block Plan of Inigo Jones's Design for the Palace at Whitehall ..	257
118. Plan of the Château de Bury	193	162. Diagram of Inigo Jones's Design for the Palace at Whitehall, Westminster Front	258
119. Château de Bury	195	163. Diagram of River Front of Inigo Jones's Design for the Palace at Whitehall	258
120. Bay of the Episcopal Palace at Sens	196	164. Banqueting House, Whitehall ..	260
121. House of Agnes Sorel at Orleans ..	197	165. East Elevation of St. Paul's, Covent Garden	261
122. Window-head, Hôtel Voguë, Dijon ..	198	166. Villa at Chiswick	262
123. Canopy of Tomb of Cardinal Amboise at Rouen	199	167. Elevation of Villa at Chiswick ..	262
		168. Façade of Wilton House, Wiltshire ..	263
		169. Elevation of the House of Amersbury, Wiltshire	264

NO.	PAGE	NO.	PAGE
170. Plan of St. Paul's Cathedral, as originally designed by Sir Christopher Wren	266	209. New Museum at Oxford	327
171. Side Elevation of St. Paul's Cathedral, as shown in the model of the first design	267	210. Plan of St. Michael's Church, Munich	332
172. Plan of St. Paul's Cathedral	270	211. Section of St. Michael's Church, Munich	332
173. Half Section, half Elevation of the Dome of St. Paul's Cathedral	271	212. Plan of the Liebfrauen Kirche, Dresden	333
174. West View of St. Paul's Cathedral	274	213. View of the Liebfrauen Kirche, Dresden	334
175. Steeple of Bow Church	275	214. Plan of the Church of San Carlo Borromeo	335
176. Plan of St. Stephen's, Wallbrook	276	215. Church and Theatre in the Gensd'Armes Platz, Berlin	336
177. Section of the Interior of St. Stephen's, Wallbrook	276	216. Porch of Rathaus, Cologne	337
178. View of the Interior of St. James's, Piccadilly	277	217. Part of the Zwinger Palace, Dresden	338
179. Neville's Court, and Library Trinity College, Cambridge	280	218. Japanese Palace, Dresden	339
180. Plan of Blenheim Palace	284	219. Brandenburg Gate, Berlin	341
181. Lesser Garden Front, Blenheim	285	220. Exterior View of the Basilica at Munich	344
182. Elevation of Park Front of Castle Howard	286	221. Plan of Wallhalla	346
183. Front Elevation of Wanstedt House	287	222. Ruhmes-halle, near Munich	347
184. The North Front of the Treasury Buildings, as designed by Kent	287	223. Glyptothek, Munich	347
185. Interior View of St. Martin's-in-the-Fields	288	224. Plan of the Pinacothek, Munich	348
186. Diagram showing the effect of reversing the entablature in a pillar	289	225. Half Section, half Elevation of Pinacothek, Munich	349
187. Radcliffe Library, Oxford	290	226. Part of the Façade of the Public Library, Munich	350
188. Southern Façade of the Northern portion of Somerset House	291	227. Nicolai Kirche, Potsdam	352
189. View of the principal Façade of the College, Edinburgh	293	228. Plan of the Museums at Berlin	353
190. Ground Plan of Kedleston Hall	294	229. View of the New Museum, Berlin	354
191. Portion of the Garden Front of Kedleston Hall	294	230. Part of the Façade of the Building School at Berlin	356
192. Façade of Holkham House	295	231. Group of Houses facing the Thiergarten, Berlin	358
193. Front Elevation of Newgate	296	232. Palace of Count Pourtales, Berlin	358
194. West Elevation of St. Pancras New Church	300	233. House at Dantzig	359
195. East Elevation of the Bank of England	302	234. Plan of the Votiv Kirche in the glacis at Vienna	361
196. Portico of the London University Buildings, Gower Street	303	235. View of the Synagogue at Pesth	363
197. Plan of the Portico of the British Museum	304	236. German Spire at Prague	364
198. Front View of the Fitzwilliam Museum, Cambridge	305	237. German Spire at Kutenburg	364
199. Plan of St. George's Hall, Liverpool	306	238. Federal Palace at Berne	366
200. View of St. George's Hall, Liverpool	307	239. Front Elevation of Town-hall, Antwerp	370
201. Grange House, Hampshire	308	240. View of St. Anne, Bruges	371
202. View of the New High School, Edinburgh	309	241. Front Elevation of Town-hall, Amsterdam	373
203. Façade of the College of Surgeons, Lincoln's-Inn-Fields	310	242. View of the Exchange, Copenhagen	374
204. Park Front of Bridgewater House	311	243. Castle of Fredericksborg	375
205. View of Fonthill Abbey, as it was in 1822	315	244. Plan of Palace at Stockholm	378
206. West Front of St. Luke's, Chelsea	322	245. View of Palace at Stockholm	379
207. Plan of Parliament Houses, Westminster	324	246. Church in the Citadel, St. Petersburg	383
208. River Front of the Parliament Houses	325	247. Elevation of Smolnoy Monastery, St. Petersburg	385
		248. Plan of the Church of St. Nicholas, St. Petersburg	386
		249. Plan of the Church of Our Lady of Kasan, St. Petersburg	387
		250. Half Section, half Elevation of the Church called du Rite Grec, St. Petersburg	388
		251. Plan of St. Isaac's Church, St. Petersburg	390
		252. North-East View of St. Isaac's, St. Petersburg	391

NO.	PAGE	NO.	PAGE
253. Half Section of the Dome of St. Isaac's, St. Petersburg	393	278. State Capitol, Ohio	442
254. Portion of the Façade of the Winter Palace, St. Petersburg	396	279. View of Grace Church, New York	444
255. Plan of the Central Block of the Palace of the Grand Duke Michael, St. Petersburg	397	280 to 285. Diagrams of Theatrical Arrangements	450 to 455
256. Elevation, Garden Front of the Palace of the Grand Duke Michael	398	286. Plan of La Scala, Milan	458
257. Portion of the lateral Façade of the Admiralty, St. Petersburg	399	287. Façade of La Scala, Milan	458
258. Plan of the New Museum at St. Petersburg	402	288. Section of the Auditory of La Scala	459
259. Pseudo-Arched Window, Museum at St. Petersburg	403	289. Plan of Académie de Musique, Paris	460
260. Elevation of a portion of the River Front, New Museum, St. Petersburg	404	290. Section of Académie de Musique, Paris	461
261. View of the New Russian Church, Paris	405	291. Opera House, Vienna	462
262. Exterior View of the Cathedral at Calcutta	414	292. Plan of the Theatre at Bordeaux	463
263. Interior View of the Cathedral at Calcutta	415	293. Principal Façade of the Theatre at Bordeaux	463
264. View of the Martinière, Lucknow	419	294. Section of the Auditory of the Theatre at Bordeaux	464
265. Begum Kotie, Lucknow	421	295. Theatre at Lyons, as originally constructed	465
266. Mosque of Selim, Scutari	425	296. Théâtre Historique, Paris	465
267. Mosque in Citadel at Chiro	426	297. Theatre at Versailles	466
268. Palace on the Bosphorus	428	298. Section of Theatre at Versailles	466
269. View of the Sultan's New Palace at Constantinople	429	299. Plan of Drury Lane Theatre	467
270. External View of the Cathedral at Mexico	432	300. Theatre at Mayence	468
271. View of side Aisle in the Cathedral at Mexico	433	301. Section of Theatre at Mayence	468
272. Arequipa Cathedral	435	302. Victoria Theatre, Berlin	469
273. Plan of the original Capitol at Washington	438	303. View of the Summer Auditory of the Victoria Theatre, Berlin	470
274. View of the Capitol at Washington, with the proposed wings	439	304. Plan of Schinkel's Theatre, Berlin	471
275. Tower of Smithsonian Institute, Washington	440	305. Dee Bridge at Chester	475
276. New Treasury Buildings, Washington	441	306. Interior of the Station at King's Cross	478
277. Girard College, Philadelphia	441	307. Exterior View of the Station at King's Cross	479
		308. Façade of Strasburg Railway Station, Paris	480
		309. Façade of Station, Newcastle, with intended portico	481
		310. Gateway at Castello del Lido, Venice	486
		311. Central Compartment of the Granary at Modlin	487
		312. Diagram showing the whole of the Façade of the Granary at Modlin	487

HISTORY OF THE MODERN STYLES

OF

ARCHITECTURE.

INTRODUCTION.

I.

THE styles of Architecture which have been described in the previous parts of this work are those which may be called the True Styles. Those that remain to be examined may in like manner be designated the Copying or Imitative Styles of Architectural Art, and differ from the preceding so essentially, that it is indispensable the distinction should be clearly appreciated, and always borne in mind, in order that any just or reasonable judgment may be formed as to their relative merits.

All the buildings belonging to the first class were—without one single exception—arranged solely for the purpose of meeting, in the most direct manner, the wants of those for whom they were designed; and the ornamentation that was applied to them either grew naturally out of the construction, or was such as was best suited to express the uses or objects to which the building was to be applied.

The immediate consequence of this is that, whether the construction of a building is mechanically correct or not, or whether the ornaments are either elegant or well designed, there is always a purpose-like truthfulness about a building of this class, which can never fail to be pleasing; and thus, whatever its other defects may be, it must of necessity possess some of the most important elements of architectural excellence.

A further consequence of this truthfulness is, that we can reason with regard to buildings of the True Styles with the same certainty, and according to the same rules, which we apply when speaking of the works of Nature. Man's works, though immeasurably inferior in degree, are parts of the same great scheme; and when they are produced by the simple exercise of man's reason, they are as distinctly natural as any of the instinctive functions which can be performed either by man or by any of the lower animals.

It may also be added that we contemplate the truthful products of man's action with the same pleasure which we experience in studying the works of nature, and derive from their contemplation the same class of gratification; for, though they do not emanate from the same high intelligence, they are the results of the same process in so far as it is given to us to understand it: their form is the same, and they

appeal more familiarly to our own feelings, and gratify even more directly our own desires.

The buildings in the Imitative Styles, being designed on a totally different principle, produce, as might be expected, a totally different class of results. It is, perhaps, not too much to say that no perfectly truthful architectural building has been erected in Europe since the Reformation. Mere utilitarian buildings are truthful of course, but the moment ornament comes to be applied, or an attempt is made, by any arrangement of the parts of a building, to obtain an architectural effect, the new element is inevitably introduced. In modern designs there is always an effort either to reproduce the style of some foreign country, or that of some by-gone age; frequently both. The form of the buildings is more or less moulded according to these foreign elements, while the ornamentation, being always borrowed, seldom expresses the construction, and scarcely ever the real truthful objects to which the building is applied.

The first consequence of this is, that, unless we know the history of a building from some extraneous sources, we can never be sure, either from its form or from the style of its ornamentation, by whom it was erected. It may have belonged to the Greeks or to the Romans, or been erected by the Mediæval architects. The highest praise that can be bestowed on a modern building is, that its details are so perfectly copied from some other style as to produce a perfect counterfeit, such as would deceive any one, if its parts were considered separately from the locality or their position in the building. The plans and arrangements being also generally designed on the same system, we can rarely guess from its external appearance to what use it was intended any given building should be applied. It may be a church, a hall, a dwelling;—anything, in short. Till within the last few years the object of a design was not that it should look like any of those things, but that it should resemble some building of some long anterior age, with which it may have no conceivable connexion, beyond the idea that the old building was beautiful, and that consequently it was desirable that it should be reproduced.

From this it is evident that, whatever the other merits of modern buildings may be, the element of truthfulness is altogether wanting. St. Peter's or St. Paul's are not Roman buildings, though affecting a classical style of ornamentation; and even the Walhalla or the Madeleine are only more servile copies, without attaining the impossible merit of being Greek or Roman temples. So, too, with our Gothic fashions. Our Parliament Houses are not mediæval, notwithstanding the beauty or correctness of their details; nor do any of our best modern churches attain to greater truthfulness or originality of design than exists in the Walhalla or buildings of that class. The consequence is, we never can look upon them with the same satisfaction as we do on those of the True Styles; and we never dare to draw conclusions from either their style or their forms as to the age in which they were built, or the purposes to which they may have been dedicated, nor can we ever feel sure that the construction we see is a necessary part of

the design, and not put there because something like it was placed in a similar situation for some other purpose in some other age.

All this not only destroys one half the pleasure we experience in contemplating the buildings of a more truthful style, but it degrades architecture from its high position of a quasi-natural production to that of a mere imitative art. In this form it may be quite competent to gratify our tastes and feelings, but can never appeal to our higher intellectual faculties; and what ought to be the noblest and the grandest of the Fine Arts, sinks below the level of Painting and of Sculpture; for, though these last are naturally inferior, they retain at the present day that truthfulness which the other has lost, and, though now generally ranked with them, in reality Architecture excites less interest than they do.

Besides this loss of intellectual value, the art has also, in modern times, lost all ethnographic signification. It may be asserted with confidence that, during the existence of the True Styles, there was not a single edifice erected in any country that pretended to be a reproduction of any building of a preceding age, nor one that was borrowed or adopted from any foreign country or people, or resembled their productions, except in so far as its builders were allied by blood, or possessed a community of feelings or interest with the people from whom they were borrowing. On the other hand, there is not perhaps a single building of any architectural pretension erected in Europe since the Reformation in the beginning of the sixteenth century, which is not more or less a copy, either in form or detail, from some building either of a different clime or different age from those in which it was erected. There is no building, in fact, the design of which is not borrowed from some country or people with whom our only associations are those derived from education alone, wholly irrespective of either blood or feeling.

So completely is this the case, that few are aware that such a science exists as the Ethnography of Art, and that the same ever-shifting fashions have not always prevailed as those that now bewilder the architectural student in modern Europe.

It is evident that two forms of Art based on such diametrically opposite principles, and aiming at such different objects, must require a very different mode of criticism, and be judged of according to very different codes of æsthetic laws; but it does not follow that either is worthless, or that, because the one is certainly good, the other must be necessarily bad. It is true we can no longer from a few details of an "Order" restore the whole with the same certainty and by the same process which enables a naturalist from a few fragments of bone to rehabilitate the animal to which they once belonged. We can no longer, from the position of two or three bases, predict with certainty the form of a large edifice, and tell the purposes to which it was originally applied. We cannot, from the frustrum of a Gothic pier, tell the age when the building was erected, nor whether it bore a vaulted or a wooden roof, nor whether it was a part of a church or a hall, a palace or a castle.

All this is so strongly felt that, though numberless books have been written during the last fifty years¹ to illustrate the Classical and Mediæval styles, and most histories include, besides these, the Egyptian, the Indian, the Chinese, and every true style known, they all stop short about the year 1500, in so far at least as Europe is concerned. None venture across the forbidden boundary of the Reformation; so that both the Renaissance and the Revival want a historian in recent times. No one who is imbued with the spirit of the True Styles can be at a loss to understand why this should be so; though it is strange that those who enforce the practice, as is done in every country of Europe in modern times, should condemn the theory. Either it is wrong in us to persevere in copying,—in which case we ought to despise the history of this style;—or, if we are justified in our present practice, we cannot be mistaken in studying the steps by which we have arrived at its principles, and, by an impartial criticism, attempting to estimate their value. Even if it should be found difficult to do this with perfect fairness, it must always be interesting to the philosophical student to investigate the steps by which Art in Europe has reached its present position. More than this, it cannot possibly be uninteresting to study any important form of Art, as it has been practised during three centuries by the most powerful, the best educated, and—barring the little group of Grecian States—the most intellectual association of states that the world has ever known. If the European nations have deliberately adopted any form of Art, it is fair to assume that there must be some reason for it; or if they have fallen into it from mere careless thoughtlessness, it must still be curious to know how this came about; and, if wrong, it is only by thoroughly knowing the form of disease that a remedy can be prescribed. The one point, however, that especially requires attention at this stage of the inquiry is to know that there are in reality two styles of Architectural Art,—one practised universally before the sixteenth century, and another invented since then,—and that the one must be judged of by a totally different canon of criticism from that which preceded it.

In order to understand what follows, it is so essential that this difference should be thoroughly appreciated that it will be necessary, before going further, to point out, as distinctly as possible, how these differences arose,—in what they really consist,—and by what new rules or standards they must be measured.

II.—REVIVAL OF CLASSICAL LITERATURE.

The most remarkable proximate cause of the change that took place in Architectural Art is one that has long been obvious to every inquirer. It arose from the revival of classical literature in Western Europe about the middle of the fifteenth century. Throughout the whole of the Middle Ages the great bulk of the clergy could read Latin with facility, and

¹ In the last century the contrary was the case. Agincourt, Durand, De Quincy, and others pass over the Gothic styles as barbarous

and unworthy of any notice, and begin the history of Modern Art with Alberti, Brunelleschi, &c.

so could many of the laity ; but so complete had been the night of the Dark Ages, that, though they understood the words, the sentiments of the classical authors found as little sympathy in the hearts of their readers as an episode of the Ramayana or Mahabarat does in that of a modern novel-reader. Even Dante reads Virgil through a Christian gloss, and, though familiar with his works in the original, he does not see the poetic Roman, so much as the metaphysical schoolman, in his glowing pages. It was not till the age immediately preceding the fall of Constantinople that the existence of the great literature of Greece became known in Western Europe ; but when Petrarch and Boccaccio first became acquainted with its beauties, they naturally lauded their discovery to the skies, and incited those who could not read Homer and Demosthenes in the original Greek to study their echoes in Virgil and Cicero. Once it became the fashion, and men had got over the unfamiliar names and allusions, it was hailed with all the enthusiasm of a new discovery, and became the literature of the day. Had the Middle Ages possessed any literature of their own, this would not have been the case, to the same extent at least. But neither in poetry nor in prose—in science nor in literature—had the Dark Ages produced anything that could for one moment stand a comparison with the glorious literary productions of Greek and Roman civilisation. We cannot, consequently, wonder at the enthusiasm which the discovery of these long-hidden treasures excited, though we may regret the too hasty generalisation that applied to every class of Art the induction which was only strictly applicable to one.

It must also be borne in mind that the revolution in Architectural Art took its rise first in Italy, and especially at Rome ; which was then the spiritual, as it had once been the imperial capital of Europe. To the Italians it was not the discovery of a strange or foreign art ; their language was almost that of the ancient conquerors of the world ; their country was the same ; the revival was hailed as a burst of patriotism, claiming for their ancestors the glory of having enlightened, as it was admitted they had ruled, the world, and priest and layman joined heart and hand in asserting the indefeasible right of Rome to be considered as the mistress of the world in all ages. Deeply as we are imbued by education with admiration for classical literature, we can hardly appreciate the enthusiasm which swelled the breast of the modern Roman on discovering in the pages of Livy the great and glorious events which had been enacted within the walls of his own native city, or the feelings with which he read, in the Books of Tacitus, the gorgeous but gloomy pictures of imperial greatness which have immortalized the Palace of the Cæsars, whose remains still stood before his eyes. He could read Cicero on the very spot where his Orations were delivered, and look down from the Capitol on that Forum which had given laws to the world, and over that city which had been before, and was then, the greatest and most illustrious of the universe. In so far as architecture was concerned, the Roman had daily before his eyes the Pantheon and the Temple of Peace, the gorgeous remains of the Imperial Thermæ and of the Palace of the Cæsars ; the porticoes of innumerable Temples were

then standing, and the Flavian Amphitheatre, more perfect than than now, was known as the greatest architectural wonder of the world.

Compared with these, the great Basilicas of St. Peter and St. Paul were externally rude and mean in the last degree, and internally almost all the beauty they possessed was derived from the ranges of columns separating the aisles, which were borrowed from the buildings of their ancestors. The wonder is, not that the Romans discarded at once what little of Mediævalism they ever had adopted, but that they had ever neglected or had fallen away from the great classical models which met their eyes at every turn.

From Rome the contagion spread rapidly to the rest of Italy. There was not a city in the peninsula which was not hallowed by some memory of Roman greatness, not one that was not even then adorned by some monument that called back the memories of the past, and reminded the citizens how beautiful the arts of the classical age had been. The patriotism which is now stirring the depths of the Italian mind is but a faint reflex of that enthusiasm with which Italy in the fifteenth century reclaimed the inheritance of the Cæsars; and, in addition to the ecclesiastical supremacy of the world, which was then the undisputed prerogative of her great capital, she claimed for her language and her arts their pre-eminence over those of all other nations. Then, as now, she strove to drive back the barbarous Tedeschi, who had meddled so fatally in her affairs; and, if she could, she would have obliterated every trace of their hated influence. If the past could not be washed out, the future at least was her own; and Roman literature, Roman art, and Roman memories were thenceforward the watchwords of the Italians.

From Italy the revival soon spread to France; partly in consequence of the direct interference of Francis I. with Italian affairs, but more certainly from the influence of the clergy, who all emanated more or less directly from Rome, or either visited it or looked to it as their leader and model in all things. Spain too was ripe for a change. The expulsion of the hated Moors from Granada, the discovery of the New World, and the enormous accession of wealth and influence which resulted from these causes, led the Spaniards to contemn the arts and literature of a divided and struggling people, their religious feelings threw them blindly into the arms of Rome, and they adopted her arts with the same enthusiasm with which they venerated her religion.

In England the progress of the revolution was far slower. A change took place in the age of Elizabeth, but scarcely in the direction of Roman art. Even the pedant James could hardly obtain a classical design, and it remained for the foreign feelings and refined tastes of Charles I. to fix fairly upon us the copying principles which had long before that time taken root on the Continent.

The Germans early abandoned an art they had never really appreciated, and, with pedantic affectation, set about the study of the classic. Their industry took, however, a literary more than an artistic form, and thus their architectural efforts during the sixteenth and seventeenth centuries are poor and contemptible in the extreme. The revolution

had, however, fairly taken root in Europe; by degrees it spread to Scandinavia, and even into Russia, and now has occupied the New World with strange deformities, and is spreading into India and every country of the world—except China and some of the less civilised Trans-Gangetic countries.

III.—REFORMATION IN RELIGION.

The great change just alluded to was wrought in Europe simultaneously with the Reformation in religious matters, not as a separate thing, but in fact as a part of the same great awakening of the human intellect. The invention of gunpowder, and the consolidation of the larger empires, had necessitated wars being carried on on a greater scale than heretofore, and so mixed the nations more together, and gave them larger and more correct ideas of the relative positions and power of each; while the invention of printing had aided in the diffusion of knowledge to an extent previously unknown in the history of the world. These, and other causes which it is not necessary to enumerate here, led to the secession of all the Teutonic races of Europe from the Church of Rome, and to that consequent excitement and spirit of inquiry which characterised the great Reformation in spiritual matters. With us it gave rise to that freedom of thought and action to which we owe so much, but accompanied by a contempt for all things Mediæval, and a hatred of everything that savoured of Romish feeling or domination. From all these causes the reformed nations were led to repudiate whatever belonged to Christian Rome, while they blindly adopted whatever had belonged to its Pagan predecessor.

Even in those countries to which the Reformation did not extend, a revolution took place scarcely less extensive or important. Though acknowledging the supremacy of the Pope, and adhering nominally to the same forms, the essence of the Roman Catholic religion was no longer in the sixteenth what it had been in the thirteenth century. The enlarged views which the revival of classical literature and art had introduced, the progress of science, and the general enlightenment of mankind, worked a silent reformation, almost as extensive as that violent one to which alone the name is usually applied; and if the countries which remained Papal did not learn to hate, they at least learned to despise the works of their forefathers. They saw the most beautiful Gothic churches fall to decay with as little regret as if they had been followers of Knox or Calvin, or they beautified them with classical details with as much self-satisfaction as could have been felt by the most orthodox churchwardens of the Georgian era.

One of the first consequences of this revolution in ecclesiastical affairs was the almost total cessation of church-building throughout Europe. Those countries especially which had thrown off the Papal yoke and dissolved their monasteries, found themselves overstocked with ecclesiastical edifices, and even France had so far changed in feeling that the buildings she already possessed more than sufficed for her wants; and, except from the increasing magnitude and influence

of the capital, she probably would hardly have erected a single important church during the seventeenth and eighteenth centuries.

In Spain the case was slightly different. The enormous influx of wealth in the sixteenth century, consequent on her connexion with the Indies, led her to spend a large proportion of it in a manner so congenial to the strong religious feelings of the country; and we find, in consequence, in Spain a considerable number of churches in the Revived Classical style which are deserving of attention from their size and richness, if not for their Art.

In Italy, however, church-building retained its previous pre-eminence. The end of the fifteenth and beginning of the sixteenth centuries were the culminating epoch of the Papal power and wealth, and saw in consequence in the commencement of St. Peter's the most daring and the most magnificent undertaking of its class in Europe, or perhaps it may be said in the world. St. Peter's was far from being a solitary example, for throughout all Italy numberless new churches were commenced and old ones altered and restored; Rome itself, as well as Venice, Genoa, Florence, and Milan, are enriched with churches of the sixteenth century which vie in splendour with the works of the Middle Ages, whatever may be said of their taste; and the Jesuits carried their peculiar style into every country they had access to, and practised it with that exuberance of richness in ornamentation which characterises their churches everywhere.

From these causes it will be easy to understand that Italy became the leader in the revolution, and not only set the example to other nations, but actually forced on the world the adoption of the Classical style of Church Architecture which had sprung up among the classical remains of ancient Rome. This new style was moulded by the genius of those great artists who attached themselves to the Papal Court at that period into a new shape, and by them fixed, for a time at least, on the attention of Europe.

Although the countries on this side the Alps abandoned almost entirely the practice of Ecclesiastical Architecture, they made up for it, in extent at least, by the erection of civil and domestic buildings, on a scale hitherto unknown. It is quite curious to observe in the works of the period how completely the change had taken place in men's minds. The great work of Du Cerceau, for instance, published in 1576, contains illustrations of thirty of "*les plus excellens bastimens de la France*," but he does not include one single church in his collection. In Mariette's famous folio work there are plans and details of one hundred palaces and civil buildings, but only very imperfect notices of eight Parisian churches; and the six folio volumes of our own '*Vitruvius Britannicus*' contain short notices of only three churches, but have full and complete details of one hundred and seventy-five civil edifices. It may also be added that but for the accident of the Fire of London in 1666, which necessitated the rebuilding of the City churches, we should hardly possess any examples from which we could know what the Ecclesiastical Architecture of this country for the last two centuries really pretended to be.

This supremacy of Domestic over Ecclesiastical Architecture was nearly fatal for the latter. However grand or magnificent a palace may be, it must possess domestic offices and apartments for servants, which no art can hide and no taste can dignify. The architects of the Renaissance tried to divert attention from these by placarding their buildings with the porticoes and details of the Templar Architecture of the Romans, but they merely succeeded in adding incongruity to the inherent defects of the subject, and degraded the borrowed features, which were beautiful in themselves, without elevating the building whose deficiencies they thought they might thus be able to conceal.

It was by no means necessary that this should be done. The temple and the palace are in themselves so essentially different, that, by treating each according to its kind, all interference is easily avoided. Nevertheless, during the last two centuries, when civil buildings occupied almost exclusively the attention of every architect, and absorbed nine-tenths of the funds allotted to building purposes, it was almost impossible that the church should escape the influence of the Domestic style. In fact, Ecclesiastical Architecture became Domestic without having the power or influence to react on the palatial style, and neither was in consequence able to elevate itself, or to shake off the trammels of the imitative system into which they both had sunk.

Another circumstance very detrimental to real architectural progress arose from the fact that the Christian ritual is essentially an internal form of worship, and makes no use whatever of the exterior of its churches in the performance of its services; a circumstance not in itself involving any difficulty, as an interior may be made as fine as an exterior, when honestly treated; but it became a source of numerous incongruities when the details of an external style came to be applied to internal purposes. It is well known how cleverly and how well the Gothic architects got over this difficulty, but at Constantinople, and more especially at Rome and Ravenna, the exteriors of the early churches were entirely devoid of ornament, apparently on purpose to distinguish them from Pagan temples. The consequence was, that, when the Italian architects were called upon to make the exterior of their churches as ornamental as the Gothic architects had done, they, having no style of their own, could think of nothing better than to suggest a Pagan peristyle. From its uselessness they dared not go further than a portico, and that generally of semi-detached columns, but for the flanks they were content with the employment of pilasters, which it must be confessed is one of the most useless as well as least constructive modes of ornamentation that could be adopted. This, added to the other difficulties enumerated above, gave a character of unreality to the style, and betrayed that continual striving after imitative forms which is its bane.

It is not necessary at the present stage of this inquiry to attempt to assign its relative importance to each of these separate elements of design. All that is here required is to point out the difference between an imitative and a true style. In the latter the architect had only to consider, first, how he could contrive the most convenient and appro-

priate building; secondly, how he could arrange this so as to be most ornamental with the least possible sacrifice of convenience; and thirdly, how he could accentuate and ornament his construction so as to be most obvious and most elegant. These three propositions contain in themselves all the elements of design, and ought never for one moment to be absent from the mind of the architect.

In modern times he has, in addition and too generally in substitution for these, to try and make the building look like something it is not and cannot be, and has to apply a system of ornamentation which is generally inappropriate and almost always useless. This practice arose out of the enthusiasm created by the rediscovery of a sister Art, and has been continued because the true Art perished under the influence of the false system then introduced, and, in this art at least, no living forms being available to which we can resort, we are still compelled to cling for models to the past.

IV.—PAINTING AND SCULPTURE.

The extraordinary development of the Italian School of Painting in the course of the fourteenth and fifteenth centuries was another circumstance which had almost as much influence on the form which the Renaissance style of Architecture took, as the revival of classical literature, or any other of the circumstances pointed out above.

It is scarcely necessary to do more here than allude to that wonderful school of Art which first took consistence under Cimabue and Giotto in the thirteenth century, almost contemporaneously with the perfect development of the Pointed style in Northern Europe, and, progressing steadily and earnestly *pari passu*, reached its culminating point about the year 1500 in that galaxy of great Painters with whose names the public are so familiar.

To the Italians in those ages Painting always was the art *par excellence*, and they cultivated it with the same earnestness and assiduity which distinguished the cis-Alpine nations in elaborating their beautiful style of architecture. In our buildings Painting was always kept in strict subordination to structural necessities: with the Italians the structure was generally considered as less important, and never thought to be complete or perfect till the Painter had covered every available space with the productions of his art. Even in so essentially Tedesco a building as the Church of San Francesco at Assisi, the paintings are thought, not only by the Italians, but by most modern critics, as more admirable than the very beautiful Pointed Architecture of the church itself.

One of the most complete and perfect examples, showing how pre-eminent Painting was considered by the Italians, is the Chapel of the Arena at Padua, painted by Giotto. The nave is merely a small rectangular apartment, covered by a simple Pointed waggon-vault, absolutely without a single architectural moulding of any sort, and pierced with a range of narrow Pointed windows on one side only; the object of the whole arrangement being to afford the greatest possible

amount of plain surface for Painting. If they could have lighted it from the roof it is evident they would have done so; but the art of glazing was not then sufficiently advanced to admit of this.

On the left hand as you enter, the whole wall is divided into rectangular compartments separated by painted architectural borders, and in each is a Scripturo subject, painted in fresco. On the right hand the same mode of treatment is followed, but interrupted by the windows, and less perfectly seen, because of their light interfering. Over the doorway is represented the Last Judgment, and opposite this is a small octagonal apse with architectural mouldings, but also richly painted.

The effect of the whole is so pleasing that a candid critic will hesitate before asserting that this little inexpensive cell will not stand a fair comparison with the glories of such buildings as the contemporary Sainte Chapelle at Paris, or even St. Stephen's at Westminster. Wonderful as these were as works of Art, there is a purity and simplicity and a loftiness of aim about this little chapel which go far to rival their splendour; and it is questionable whether in this direction something even loftier and grander might not have been attained. Practically, perhaps, the real objection to the dependence of Architecture on Painting alone lies in the fact that we cannot always command Giotto's, while we can always be sure of obtaining master-builders; but more than this, it is evident that the effect of even Giotto's frescoes would have been heightened by architectural mouldings being interspersed with them. As usual, the truth is, that perfection lies between the two extremes. The Italians of that age despised architecture as an internal decoration far too much. We, on the contrary, neglected painting, in order to display our mechanical skill; and the consequence is, that, though we produced miracles of masonry, our buildings want at times just that touch of higher Art which would render them sublime.

This distinction between the Italian and Northern styles lies so completely at the root of the whole subject, that it may be well, before proceeding further, to advert to another more celebrated example, the Sistine Chapel (Woodcut No. 1), which is not only decorated in the same manner, but, from the accident of the time when it was erected and the fame of those employed on it, exercised immense influence on the future development of the Art.

By comparing it with the contemporary chapel at King's College, Cambridge (Woodcut No. 2), we may perhaps arrive at some clear idea of the distinctive modes of ornamenting interiors on the two sides of the Alps.

The Roman chapel was commenced for Pope Sixtus IV. by Baccio Pintelli in 1473; the painting of the roof was completed by Michael Angelo in 1508, and the Last Judgment in 1541. Externally the chapel is as devoid of ornament as a barn. Internally it is an oblong hall, less than 50 feet in width, and 140 feet in length. The walls are nearly plain to a height equal to the width of the chapel, where a coved ceiling in plaster of very ordinary design springs from a string course which is cut through by the round heads of the windows,—six on each side, and originally two at each end. Below the bottom of these windows

another string course supports a slight pilaster, to carry the pilasters from which the arches of the cove spring, and a third lower down separates the whole wall into three nearly equal belts. The lowest of these, within the sanctuary, which occupies two-thirds of the whole length



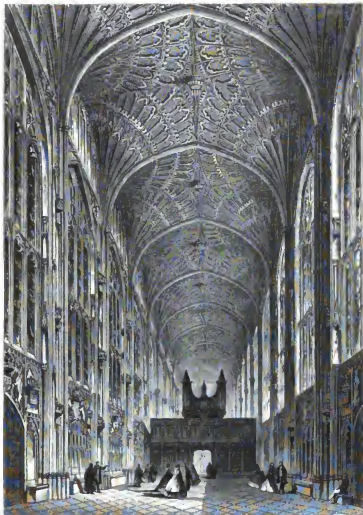
1.

Sistine Chapel, Rome.

of the chapel, was to be adorned with the tapestries for which Raphael made the cartoons now at Hampton Court. The next, or principal belt, was adorned, on the left hand of the altar, by types from the Old Testament by Signorelli, Roselli, and others, and on the right hand

by their antitypes from the New Testament, by Perugino, Botticelli, Ghirlandajo, and others. The Ascension of the Virgin was over the altar; the Nativity, and its type the Finding of Moses, on either hand.

The third belt was occupied by the windows, with figures between,



2.

King's College Chapel, Cambridge.

and over this came the famous ceiling painted by Michael Angelo; the cove occupied by Sibyls and Prophets, and the well-known groups which fill up and enrich the whole; the flat part of the ceiling by subjects beginning with the Creation at the end next the altar, and

ending with the Deluge at the end next the entrance. The original design of the lower part of the chapel was afterwards altered by Michael Angelo, who obliterated the two windows over the altar and the compartments which occupied that end, and filled the whole with his great masterpiece, the Last Judgment.

Although King's College was founded by Henry VI. in 1441, the building of the Chapel was not seriously undertaken till 1479, and was not completed in all essentials till 1530. It is a little less in width than the Sistine Chapel, being only 45 feet wide; but it is twice as long, being 290 feet internally, and divided into twelve bays instead of six. It is also higher, being 78 feet to the apex of the roof instead of 60. Throughout, from floor to keystone, its decorations are as essentially masonic as those of the Sistine are pictorial; the paintings at Cambridge being as subordinate to the architecture as that is subordinate to the pictures at Rome. In both the subjects are the same, and similarly arranged; the types from the Old Testament being arranged in the windows on one side of the chapel, and the subjects from the New Testament opposite to them on the other; but at Cambridge they are all on glass, and filled in between the architectural mullions of the windows, so that no moulding or constructive feature is broken or interfered with by the paintings, but, on the contrary, the pictures are cut up and sometimes very seriously interfered with by the architecture.

Waiving for the present all criticism on the merit of the paintings which adorn the Sistine Chapel, and assuming only that they were carried out as originally designed by the artists who painted the pictures on the wall, and waiving also all question as to whether King's College Chapel is or is not a good specimen of Gothic Art, the comparison of the two buildings fairly raises the question between the two styles, in so far at least as interiors are concerned.

Is it better that a building should be ornamented from floor to ceiling with paintings appropriate to its destination, or that it should depend on constructive and architectural details only for its ornamentation? Is it expedient to apply the resources of the highest of the æsthetic plastic arts to this purpose, or to depend only on an æsthetic form of the technic art of architecture to accomplish this object?

Theoretically, it is easy to answer that the first is the highest, and consequently the best; and if the Italians had fairly carried out what they so successfully commenced, it is tolerably clear that the question would never have been afterwards raised, and that painting, and that alone, would have been applied to the highest class of internal decoration. The introduction, however, of inappropriate classical architecture into their interiors, and the abandonment in a great measure of the principles on which the Arena and the Sistine Chapels were designed, has so vitiated the question that it is not so easy to decide it now. In the mean while it will probably be admitted that a wall divided into compartments, and adorned with paintings designed for the place they occupy, is a higher class of ornamentation than can be obtained by any mere structural form. The cove of the Sistine

Chapel is also very beautifully and very appropriately ornamented, but the flat part of the ceiling is certainly a mistake. It depends on your position, standing at the altar or at the entrance, whether you see the figures upside down or not. It is always irksome and unpleasing to look up at figures immediately above you, and it is impossible to get rid of the feeling that they may or should tumble out of their places. It is, besides, an offence against construction. If a wall is sufficiently thick, and is perpendicular, the eye requires no suggestion of construction to be satisfied of its stability: but with a roof it is different. If of stone, the most elaborate contrivances must be resorted to to satisfy the mind of its stability; if of wood, the framing ought to be shown; and if of any other material, coffering or panelling, or some other expedient, must be employed to suggest to the mind that the inherent difficulty of the construction of a horizontal covering has been successfully accomplished. There are, consequently, a thousand ways by which it can be enriched or ornamented either with colour or mouldings, but it may safely be asserted that it should never be by figure-painting. So thoroughly imbued, however, were the Italians with the idea that figure-painting, and that only, was the appropriate way of ornamenting interiors, that they set a fashion which was followed in every palace and almost every church of Europe for the following two or three centuries. Every one can call to mind the sprawling gods and goddesses or saints and angels who cover the ceilings of the palaces and churches of that style. It was a mistake when so used, and in fact it was the abuse, not the use of painting, coupled with the abuse of classical orders, which prevented the interiors of the Renaissance churches from rivalling those of the Gothic age.

Almost all these defects were avoided in the Arena Chapel, and might easily have been obviated in any building specially designed to be decorated by paintings. The circumstance which really rendered the system a comparative failure was the simultaneous introduction of the classical orders as interior decorations. These cut the building up in such a manner as to destroy all unity of effect, and left the painter to fit his designs into such spaces as the architect left him. It also rendered the latter supreme in carrying out a design which was neither meant to exhibit ornamental construction, like King's College Chapel, nor to afford unlimited scope for the art of the painter, like the Arena Chapel, nor even to combine the two, like the Sistine; the object being to produce a classical interior which might to some extent represent construction, but which if adorned with painting must be so in duo subordination to the classical details.

The treatment that such a building as the Sistine Chapel ought to have received externally is obvious enough. It ought to have been plain ashlar masonry, perhaps slightly accentuated at the angles, up to the string course at the bottom of the windows. These ought to have been enriched with appropriate mouldings and ornaments, and over them there should have been a cornice of sufficient projection and richness, which would have completed an appropriate and

beautiful whole; suggesting the interior and the purpose for which it was used. Any architect who knew his business would have felt the enormous advantage of getting rid of buttresses and supports of all sorts, and, having no constructive difficulties to contend with, he ought easily to have surpassed the complicated construction of the Middle Ages, where beauty is always obliged to bend to mechanical necessities. This was not, unfortunately, the way the Italian architects looked at it. They were bitten with a mania for classicality, and, with the Amphitheatre and the Temples before their eyes, thought it indispensable to beauty that every building should be covered with a network of pilasters and arcades, and hooped with cornices one over another, in defiance, generally speaking, of either architectural beauty or constructive necessities.

If it had happened that the Italians had developed Sculpture on the same truthful principles and with the same energy which they applied to Painting, the history of Architectural Art might have been very different from what it has been. There is no argument which applies to the use of Painting internally, which does not apply with equal force to the employment of the sister art externally. The two are in fact, when properly applied, the highest and most legitimate modes of ornamenting buildings. But this is only the case when they adhere strictly to their own principles, and are each carried out in their own appropriate forms. The two may be, and ought always to be, linked together by the intermediate art of Architectural carving. But neither of the two principal arts ought ever to be allowed to interfere with the province of the other, or to transgress on that of the third, or harmonizing art, which is in itself for Architectural purposes scarcely less important than the others. While plaster, with which the internal walls must always be more or less covered, affords the best possible surface for painting, sculpture may and generally should be executed in the same materials of which the wall is composed to which it is applied. It is so easy to provide panels for groups, either in high or low relief, and belts for friezes or niches for single statues. All this might have been adopted by the Italian architects, and, without violating one single principle of construction, might have rendered the exterior of their buildings as phonetic as the interior, and given life and meaning to the whole. Unfortunately the mania for the "Orders" left no place for statues, except as acroteria above the roof, but there they were as inappropriate and as unhappy as the figures painted on the ceilings were on the inside. Before the "Orders" became an absolute fixed quantity, the Cinque-cento architects very nearly hit on the right path. They felt that painting was not applicable to the exterior of edifices, and in consequence proposed to reproduce in stone on the exterior of their buildings the arabesque or other decorative designs which had been found painted in the baths of Titus, and which Raphael and others have so successfully imitated in the loggie of the Vatican and elsewhere (Woodcut No. 3). This taste did not last long, for it was soon discovered that what was elegant and appropriate when sketched in colours for an interior, became an expensive monstrosity

when deliberately carved in stone and set up as part of a gigantic façade. It was, besides, an attempt to use in one art the designs only appropriate for another. It failed in consequence, and from its failure the architects fell back on the easy but most inartistic subterfuge of copying the classical orders, to hide their own sad want of appreciation of the true conditions of the problem they had undertaken to solve.

Any one who casts his eye over the wonderful façade of the Certosa at Pavia,¹ or of the Spanish and French churches of the same age, is lost in wonder at the amount of labour bestowed upon them. He may be fascinated by the beauty of their details, but he cannot but feel that, considering the labour involved, their real effect is less than that produced by any other style of decoration. It was, in fact, applying to an exterior what really belonged to internal art, and to a hard and durable material a style appropriate only to the fanciful sketchiness permissible with more perishable materials.

The failure of this attempt led to a most unfortunate reaction in the opposite direction. Finding that this style of internal decoration failed to produce the desired effect when applied externally, and not perceiving that the failure was in the mode of doing it and not in the thing itself, the architects of the day crowded the interiors of their churches and palaces with the great Orders which the Romans designed and destined chiefly for external decoration; they thus produced not only most offensive inappropriateness, but dwarfed their buildings and cramped their designs to an extent which will be only too often apparent in the sequel.



3. Fragment from the Hôpital Chapel, Verona.

V.—TECHNIC AND PHONETIC FORMS OF ART.

The differences pointed out above between the modes in which the art of Architecture was practised before the Reformation and after that event, are sufficient to account for all the formal changes that then took place, and to explain the influences which gave rise to the external variations of style between the two epochs, and they have also the advantage of being intelligible to the most superficial observer. But the real and essential change lies deeper, and cannot be properly explained without reviewing the whole philosophy of the arts in a manner which would be entirely out of place in the Introduction to

¹ See Woodcut No. 22.

such a work as this. It is, however, so important, that a brief statement of the principal points is indispensable before proceeding further.

All the arts practised by man may be divided into two great classes,—the Technic Arts and the Phonetic Arts. To the first group belong all those which are concerned with the production of food, clothing, and shelter for man, and generally all the useful arts. In the other class are grouped all those arts which arise out of the special gift of speech which man enjoys alone of all living beings. It comprises Poetry, Painting, Sculpture, and, in short, all those arts which minister to the intellectual wants of mankind, as the Technic arts were invented to supply his physical necessities.

Of course it is impossible to draw a line sharply between the two groups, so as accurately to define their limits, and the one continually overlaps the other in a manner to prevent any compendious system of classification that can be stated in a few words. For present purposes this is of little consequence, as all that is wanted here is to point out the different modes in which perfection is attained in either class.

The process by which progress is achieved in the useful arts is very much the same as that by which investigations are conducted in the sciences. In the latter, after they have passed their infancy, the individual is nothing, the age everything. If a giant does occasionally appear, he only makes a rapid step in advance, which would be accomplished as certainly, though perhaps more slowly, by ten dwarfs. It is bit by bit, hour by hour, year by year, that our agriculture has been converted from the rude processes of our forefathers to the high farming of the present day, that the Galley of the Edwards has been developed into the Warrior or the Persia, or that the narrow bridges of the mediæval architects have been superseded by the spacious arches of London Bridge or the fairy framework that spans the Tamar.

Few know, and fewer care to learn, who were the men who invented all the multifarious processes of modern agriculture. No one, if he tried, could find out who improved our ships, and even now, though the attention of all the world has been fixed upon her ever since her keel was laid, no one knows who designed the Warrior.

In the competition for the new Blackfriars Bridge no one cares who is the engineer to be appointed. Of those who competed, some suggested a three, some a five, others a seven arched bridge. Some were for wrought, others for cast iron; some preferred stone, or granite, or brick. But that is all. The Common Council—like a Mediæval Chapter—have to decide on the number of arches, the material, and the expense. That done, there are a hundred men, any one of whom will build the bridge as well as the remaining ninety-nine. All the public know is, that, whoever builds it, it certainly will be a better bridge of its class than any that has been built before. Exactly as it was with architecture in the middle ages so it is now with engineering, and so it always must be when an art is cultivated on true principles.

In the present day any man can know more of astronomy or optics than was known to Newton, or can be a better chemist than Sir Humphry Davy. Any mechanic can make a better steam-engine

than Watt, or a better power-loom than Crompton ; and it requires no special ability to build a better ship or bridge than any that were built in the last century.

When, however, we come to the phonetic arts the case is widely different. We do not now find men writing better epics than Homer, or better dramas than Shakespeare ; we do not see finer sculptures than those of Phidias, or more beautiful paintings than those of Raphael. In all these instances the individual must be everything, the age little or nothing. So completely do we feel this, that, while we are prepared to give thousands of pounds for an original picture by any great master, we will not give one hundred or even as many shillings for a copy, though that may be so perfect that, if seen under the same circumstances, not one man in a thousand could detect which was the original. We treasure a statue by Canova or Flaxman if we know it to be genuine, or a sketch by Reynolds or Hogarth, or a fragment of a drama by Shakespeare, or of a tale by Walter Scott—though far better things may have been done by those masters themselves or by others ; but it is the individual who stamps the value on everything in these arts, and they are prized accordingly.

The fact of an æsthetic element being added to a useful art, though it obliterates to a certain extent the broad line of demarcation between the two groups, does not alter in the least the process by which excellence must be attained in the Technic, as contradistinguished from that to be followed in the Phonetic arts.

Mineralogy and Metallurgy have been refined into Jewellery and Orfèverie, Pottery into all the forms of Ceramic art, Weaving into Embroidery, Dyeing into Tapisserie, by exactly the same process which distinguishes every other step in these manufactures.

Every *useful* art is in fact capable of being refined into a *fine* art, so as not only to supply the sensual wants, but also to gratify the intellectual desires of mankind, but that can only be done by gradually elaborating its special advantages, never by borrowing from other arts.

To return to the three primary divisions—Cooking may be refined into Gastronomy, Tailoring into an important art without a name, and Building into Architecture. Identically the same process which makes the difference between a boiled neck of mutton and a dish of *côtelettes à l'Impérial*, or converts the working dress of a housemaid into the coronation robes of a queen, can convert the most commonplace building merely designed for shelter into a Palace or a Temple.

So long as this path was followed, progress was achieved in Architecture as in all the technic fine arts by every people of every nation, even the most savage ; wherever it has been abandoned, success has become impossible.

So completely is all this practically acknowledged, that no one ever dreams of altering the poem of even a very inferior poet, or of improving a statue or a picture, though they may be only the second-class works of artists of no special eminence. But in the middle ages no one ever hesitated to rebuild the nave of a cathedral or to add towers or chapels in the newest fashion to the oldest churches. No

Comptroller of the Navy ever hesitated to cut one of Sir W. Symonds' ships in two if by lengthening her he could improve her qualities. No one regretted the pulling down of old London Bridge, nor has any one suggested that Westminster or Blackfriars should be rebuilt exactly as they originally were out of respect to the memory of Labeyle or Mylne.

On the other hand, it would be considered sacrilege to meddle with or attempt to improve St. Paul's Cathedral out of respect for Wren, Blenheim must remain the most uncomfortable of palaces because it was so left by Vanbrugh, and even Barry's Parliament Houses have become a fixed quantity that no one must interfere with. In fact, the individual is now everything in Architectural Art, while the age is of as little importance as in a poem or a picture.

A history of Poetry without the names of the authors of the poems must be as unreadable as it would be unintelligible, while a collection of the Lives of the Poets is one of the most interesting works that can be written, and it adds immensely to the interest of a poem to know the circumstances under which it was written. The same is true to a very great extent as regards Painting and Sculpture. In these arts the genius and taste of the individual artist are always uppermost in our mind, and whether he belonged to an ancient or to a modern school, whether he could or could not draw or colour, is of comparatively little consequence. It is the mind that guided the hand that interests or speaks to our hearts through every difficulty and every disguise.

With Architecture the case is widely different. We do not know, or care to know, the name of a single Egyptian or Indian architect. But any one who has travelled in India may have seen in the present century such buildings rising before his eyes as the ghats at Benares, the tombs and palaces at Deeg, the temples of Southern India,—and if he had inquired he would have found that they were being erected by local masons, men who could neither read, write, nor draw, but who can design at this hour as beautiful buildings as any that ever graced that land.

For the same reason, no one has cared to record the names of the designers of the mediæval cathedrals; probably nobody knew even then who the architects were, more than we know now who designed the Warrior; and if we understood the principles of the art, it would be of the least possible interest to us to know who they were. The art was a true art, and it was more difficult to do wrong then, than it is to do right now. No genius, however great, could then enable an individual to get much ahead of his compeers, while the most ordinary ability enabled any one to do as well as the rest.

But in our age, when Painting, Sculpture, and Architecture are classed as sister arts, and it is assumed they may be conducted on the same principles, the case is widely different. Painting and Sculpture, as just remarked, are essentially Phonetic arts, *i. e.*, arts used either to perpetuate or accentuate vocal utterances, or to supplement what is written, and they effect this generally by imitating existing things.

In Egypt these two arts took the place of writing entirely, and, owing to there being no alphabet, became hieroglyphical, and were actually the only mode of recording speech. Since the invention of the alphabet, they have ceased to be the principal mode of recording thoughts, and can only be regarded as supplemental to written modes of expression. They possess, from their power of imitation and peculiar vividness of representation, many advantages over the mere *littera scripta* in many circumstances; still they are, and always were, parts of the same class of things.

Such a series of pictures, for instance, as the *Rake's Progress* or the story of the *Two Apprentices* by Hogarth, are original novels written with the brush; and nine-tenths of our paintings and sculptures are merely transpositions of passages in books expressed in another form which had before been recorded alphabetically. The rest are imitative representations of persons or things.

Speaking, Writing, Painting, Sculpture, are merely different modes in which men's thoughts can be communicated to other men, or perpetuated for the use of posterity. But with these Architecture has nothing in common; it neither illustrates any literature nor imitates anything. Its object is to supply wants of a totally distinct class, and it reaches its aims by an entirely different mode.

Architecture is in fact nothing more than the æsthetic form of the purely Technic art of building, and can only be elaborated successfully on the same principles which guide and govern all the purely Technic arts. If all this is clearly appreciated it will easily be perceived that the really great change that was introduced into the practice of Architecture at the Reformation was this:—a Technic art came to be cultivated on the principles which belong only to one of the Phonetic class. After this it would be ridiculous to talk of St. Peter's without naming Michael Angelo, or St. Paul's without alluding to Wren, or Blenheim or the Parliament Houses without the name of Vanbrugh or Barry. Though the cause has hardly been understood, this has been so essentially felt, that hardly any one has attempted to write a continuous history of the Renaissance styles of Architecture, but Vasari, Milizia, De Quincy, and many others have written the lives of the most eminent architects. So completely is it a fact that a building has now become the expression of an individual mind, that, were it not that it will be convenient to follow the same system in treating of the *modern*, as has been adopted in describing the *ancient* forms of Architectural Art, it might be well to profit by their example in the following pages. The "Lives" will always be more interesting than the history, and more pleasant to read; but it is only so, because the art is cultivated on mistaken principles which can never conduce to progress or lead towards the attainment of perfection.

The first inconvenience of this new system is that it subjects Art to the caprices and vagaries of an individual intellect, which, if good, would have added value to a work of true Art, but, if bad, proclaims its deficiencies in every part of a design. It has the further inconvenience that what a man learns in his lifetime dies with him, and his successor

has to begin at the beginning, and, following what may be a totally different track, their careers neither assist nor probably even cross each other. But perhaps the greatest inconvenience is the remarkably small amount of thought of any kind that a modern building ever displays. An architect in practice never can afford many hours to the artistic elaboration of his design. The plan, the details, the specifications may occupy weeks—in large buildings probably months—but once drawn, it is done with. In almost all cases the pillars, the cornices, the windows, the details are not only repeated over and over again in every part, but are probably all borrowed from some other building of some other age, and, to save trouble, the one half of the building is only a reversed tracing of the other. In one glance you see it all. With five minutes' study you have mastered the whole design, and penetrated into every principle that guided the architect in making it; and so difficult is it to express thought where utility must be consulted, and where design is controlled by construction, that the result is generally meagre and unsatisfactory in the extreme. In a work of true Art, such as a mediæval cathedral for instance, the case is different. Not only have you the accumulated thought of all the men who had occupied themselves with building during the preceding centuries, and each of whom had left his legacy of thought to be incorporated with the rest, but you have the dream and aspiration of the bishop, who designed it; of all his clergy, who took an interest in it; of the master mason, who was skilled in construction; of the carver, the painter, the glazier, of the host of men who, each in his own craft, knew all that had been done before them, and had spent their lives in struggling to surpass the works of their forefathers. It is more than even this: there is not one shaft, one moulding, one carving, not one chisel-mark in such a building, that was not designed specially for the place where it is found, and which was not the best that the experience of the age could invent for the purposes to which it is applied; nothing was borrowed, and nothing that was designed for one purpose was used for another. You may wander in such a building for weeks or for months together, and never know it all. A thought or a motive peeps out through every joint, and is manifest in every moulding, and the very stones speak to you with a voice as clear and as easily understood as the words of the poet or the teaching of the historian. Hence in fact the little interest we can ever feel in even the stateliest of modern buildings, and the undying, never-satisfied interest with which we study, over and over again, those which have been produced under a different and truer system of Art.

All this is as true of Classical Art as it is of Gothic, though we have not the same means of judging of it. It is certainly equally true of the Indian styles, and even the quaint, grotesque style of the Chinese acquires a certain amount of dignity from this cause to which it certainly is not entitled for any other quality of design.

The evils pointed out above have been aggravated in modern times by Architecture being handed over too exclusively to professional men—to men who live by it and make it their business, and who generally

succced more from their businesslike habits than their artistic powers. It was well said by Vietor Hugo, "*Ceci tuera cela : le Livre tuera l'Eglise.*" The doom of Architecture was sealed from that hour when Literature became the only object of study, and the only aim of a polite education; and more especially when the poetry, the eloquence, the history, or the philosophy of the Classical periods were alone considered worthy to occupy the attention of the upper classes. They still might admire or occupy themselves with Painting and Sculpture, in so far as they were or could be employed to illustrate that Literature, or might admire buildings which recalled it; but Architecture ceased to be a matter of education or a requisite part of the knowledge of a gentleman, it ceased to occupy their serious attention, and consequently became professional—a matter of business, and no longer the dream of poetic or the occupation of refined and educated minds. Though the architects might be, and very often were, men of genius and of taste, they had not the leisure requisite to elaborate their designs, and were always under the disadvantage of working out designs for other parties, and controlled either by a want of taste on the part of their employers, or an unwillingness to spend the money requisite to carry out a design artistically. It was no longer, in fact, the natural form of utterance, or the occupation and favourite recreation of the best educated and most refined classes of the modern nations of Europe; and it need hardly be added that, even from this cause alone, it must have sunk very far below the level at which it formerly had stood.

Another and cognate circumstance that mainly influenced the fate of Architecture at this period was, that most of those who first practised it at the time the revolution took place were either amateurs or sculptors and painters. Alberti may be named as among the earliest and the most distinguished of the first class. Among the latter, it is hardly necessary to name Michael Angelo, Raphael, Giulio Romano, Peruzzi, Leonardo da Vinci, &c. Of all these men, the last named alone had the peculiar mechanical and mathematical form of mind which may enable a man to dispense with educational training. The consequences of this might easily have been foreseen. All painters can make architectural designs for the backgrounds of their pictures, and many of them do it with excellent effect. Where they want shadows they have porticoes at command; where too large a flat space occurs, it is easy to break it up with pilasters; cornices and string courses contrast well with vertical lines, and niches alternating with windows give variety; while domes and spires may break the sky-line to any extent. All this is easy, and may all be sketched in a morning. But if any one supposes that such a design will make a permanently satisfactory building, he knows little of the demands of a true art, and how little its requirements are to be met by such child's play. It must nevertheless be confessed that this is too much the mode in which modern designs are made: it is just because they are so constructed that they are so generally failures.

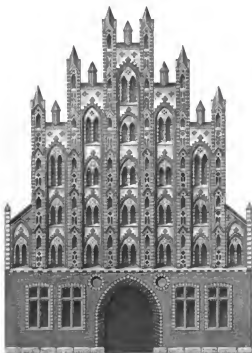
A technic art, when up to the mark, requires for its practice not

only the devotion of a life on the part of the master, but all his subordinates must each be able to perform independently the task assigned to him. In the art of ship-building, civil or mechanical engineering, mentioned above, from the master who sits in his office and organises the whole, to the boy who sweeps out the workshop, every one must be skilled in his own speciality, and every one able to perform, more or less perfectly, the task of every one below him; all must know and be able to introduce every improvement and refinement that has been practised elsewhere up to that hour. With such an organisation as this, perfection is now attained in the mechanical arts. With a similar combination, perfection was reached in Architecture in the middle ages; and the attempt to supersede this and to introduce the plan of designing by the sketches of an individual, is really the root of the difference between the two systems. Even now it never could have been carried through, unless Architecture had been reduced to its simplest form of expression. Unless a modern architect is allowed to borrow his pillars, his cornices, his details, wholesale from some other building, he never could get on. He must either, under pretence of looking like the Classical architects, make his buildings uniformly simple, or, fancying he is emulating the Gothic architects, make them designedly irregular, or he never could get through with his work. In the present state of the art, no one man, however skilled, could properly think out all the details of even one important building in a lifetime; and, without a reorganisation of the whole system, we must in consequence be content to allow copying to the fullest extent, and must be satisfied with shams, either Classical or Mediæval, until at least the public are better instructed, and demand or initiate a recurrence to the principles that guided the architects of those ages when true and real buildings were produced.

VI.—EXAMPLES.

In order to make as clear as possible the steps by which this downward change was effected, it may be well, before attempting to describe particular styles in detail, to examine one or two typical examples as illustrations of the change.

The first here chosen for this purpose is a house in the Griefswald (Woodcut No. 4), which is purely Gothic in design and detail, and a rich and pleasing example of its class. The base is solid and well proportioned, all the upper parts are of good design, and the arrangements of the buttresses and the ornaments between them elegant and appropriate, if looked at from a purely Gothic point of view. Had it been the gable-end of one of the churches of that neighbourhood, or of some great civic hall, no fault could be found with it; but as it is the upper part of a house, and divided into five stories, the verticality which is so appropriate in a church becomes unmeaning in a dwelling. The floors are not marked, and you are left in suspense whether the upper part is one great



4. House in the Griefswald. From Rosengarten. Arch. Stylarten.

"solder" or loft, or is really divided by floors between each of the ranges of windows.

This was felt to be a defect by the architects of the day, and the consequence was, that, so soon as Domestic Architecture began to emancipate itself from the trammels of the ecclesiastical arrangements, and to assert its own importance, we find the string courses marking strongly and appropriately the floors into which the house was divided. In the next example, of a house in Brunswick (Woodcut No. 5), we find this feeling strongly developed, and with very pleasing effect. The design is also interesting, as showing how readily the Classical details lent themselves for the nonce to the new exigencies of design. The Gothic architects may with justice pride themselves on the beauty of their clustered piers or traceried windows, the appropriateness for church purposes of their pointed arches, and the aspiring character of their pinnacles and spires; but they never invented, as they never wanted, a class of buildings in which the horizontal lines prevailed to a greater extent than the vertical. On the other hand, it is just on this point that Classical Architecture is strongest. Nothing has ever yet been done equal in combined richness and grace to the Corinthian entablature, or in strength or appropriateness to that of the



5.

House at Brunswick. From Rosengarten.

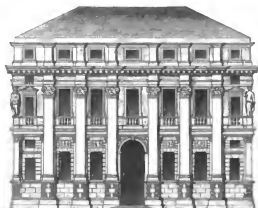
Doric and plainer orders. It is no wonder, therefore, that details so perfectly appropriate were seized on with avidity by the architects of that day, which happened also to be just the time when the taste for Classical Literature was reviving, and men were eagerly affecting whatever reminded them of Rome and its greatness.

Having adapted the cornices to mark their floors, it was hardly possible they could avoid introducing the Classical pillars which formed a part of the order. This was done timidly at first, and as mere ornaments, and, had the imitation remained there, no great harm would have been done; but it was a step in the wrong direction: it was employing ornament for mere ornament's sake, without reference to construction or the actual purpose of the building; and, once it was admitted that any class of ornament could be employed other than ornamented construction, or which had any other aim than to express—while it beautified—the prosaic exigencies of the design, there was an end of all that is truthful or that can lead to perfection in Architectural Art.

It was a long time, however, before this became apparent, and most of the early Italian buildings of the fifteenth century are more beautiful than those which preceded them. Even so late as the middle of the sixteenth century we find such a design as this of the Grimani Palace at Venice (Woodcut No. 6), which embraces all the elegance of Classical Art, with the most perfect appropriateness to the purposes of a modern palace. Even the introduction of a mezzanine on the ground floor is so cleverly managed as not to be offensive, and the projection given to the upper cornice, in excess of that used in the lower orders, brings the whole into harmony. The most enthusiastic advocate of Gothic Architecture may be induced to admit that there is nothing of a palatial character, out of Venice, erected either in Italy or on this side of the Alps, so beautiful as the façades of this and the Vandramini, the Cornaro, and other palaces of this city. The only buildings that can fairly be compared with them are such as the Casa d'Oro, the Foscari, and others of their class in Venice itself. It may be argued that these last are more picturesque and richer in detail; but they certainly have neither the solidity nor the simple elegance of the more modern examples. Be this as it may, it was probably only in such examples that the Classical orders could be applied with appropriateness. It required a climate so warm as to admit of very large openings, and a street façade, all the stories of which could be applied to state and



festival purposes; all the sleeping accommodation and offices being relegated to back courts and alleys. Hence the great difficulty, as we shall afterwards see, of applying the "orders" to English country houses, all four sides of which can be seen; and where the upper story was never, as in the Italian town-houses, the principal and most dignified of the three.



7. Valmarina Palace, Vicenza. From Palladio, *I quattro Libri dell' Architettura*.

These requisites, however, were rarely found, and the consequence was, that the style soon passed into the next and worst stage of its existence. This is well illustrated by the annexed elevation of a palace at Vicenza, by the celebrated Palladio (Woodcut No. 7), which, though a fair specimen of the master, contains nearly all the faults inherent in the style. The principal order, running through the two principal stories, and being composed merely of pilasters, loses all meaning and appropriateness. The entablature which these support is too important for a string course, and, having another story over it, does not mark the roof; which is the only real meaning a cornice ever can have when not employed as mere ornament. The angles, instead of being strengthened, either by being brought forward or rusticated, are weakened by having two more stories of windows inserted, and, instead of repeating one of the pilasters which encumber the centre, we have only a detached statue to support the great cornice—thus adding absurdity to weakness. We find, in short, in this design, ornamentation entirely divorced from construction. Not only is there an attempt to make the palace look like a building of a long previous age, but to make it appear as if it were one great hall, instead of a five-storied building, which every one sees that it is. In spite of the beauty and grandeur of the order employed, and in spite of all the elegance for which Palladio is so justly celebrated, we cannot but feel that Art had reached a form entirely different from that employed anywhere else, and was conducted on principles diametrically at variance

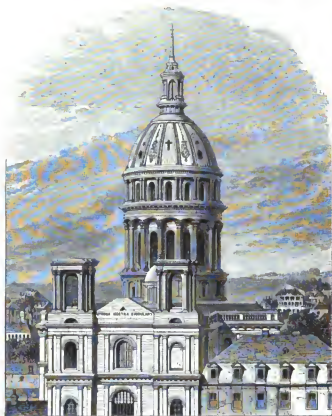
with those which guided the architect who designed the buildings of either 'Classical or Mediæval times, or indeed of any true styles of Architecture.

The same defects of design prevail, to a greater or less extent, in every building erected from Palladio's time to our own day. In spite of all the grandour of many of the palaces and churches built during that period, and in spite of all the beauty and elegance of the style employed, there is a falsehood and a striving at false effect running through the whole that always leaves an unpleasant impression on the mind of the spectator, and neutralises, to a great extent, beauties of design and detail which it would otherwise afford the highest gratification to contemplate.

The fact that since the revival of ancient learning all architects have been composing in a dead language is another point so important that it cannot be too strongly insisted on here. It not only has been the guiding principle of every design, but is the foundation of every criticism we utter. Nearly the same thing occurred in verbal literature in the first enthusiasm of the revival. No scientific treatise was considered worthy of the attention of the learned, unless clothed in the dignity of a Classic garb; and even such men as Milton and Gray were prouder of their Latin *poëmata* than of their immortal productions in the vernacular tongue.

The first effect of this state of things is, that the practice of the art is confined to a limited and especially educated class of architects; and what is far more disastrous is, that their productions are appreciated only by the small class of scholars or archæologists who are really as learned, though probably not so practically so, as themselves.

The learned in Art, for instance, go into ecstasies on observing the purity of style and correctness of composition which pervade every part of St. George's Hall, Liverpool. It recalls every association we ever felt in contemplating Classical Art, and reproduces all we ever dreamt of as great or good in the best age of that school. But common people do not feel this. They would not feel offended if the pillars were one diameter more or less in height, if the proportions of the entablature were altered, and even if the cornice were of twice its proper projection. The absence of windows does not strike them as a beauty; on the contrary, they think that it gives a gloomy and prison-like aspect; and, in spite of all our preaching, they feel that a far more convenient and suitable building might have been got for half the expense. What an uneducated man would appreciate and admire would be elegance combined with common sense, while the only things that offend an educated man would be faults which are equivalent to false quantities and errors of grammar. If we were to apply to literature the same canons of criticism which we use in speaking of architectural designs, a Porson or a Bentley would be a far greater man than a Shakespeare or a Milton. We glory in our learning, while the less educated classes prefer the works of a Burns or a Walter Scott to the most finished productions of the most learned pedants.



5

New Cathedral at Boulogne. From a Photograph.

If an architect should err a hand's breadth in the proper relative proportion between the diameter and the height of a Doric column, all the educated world cry shame on him; and if he should venture to alter the distribution of the triglyphs, or attempt an interference with the mutules, he would be condemned for ever by professional critics. But if he applied the portico of the Parthenon one day to a County Jail, and the next attached the same feature to a Protestant House of Prayer or to a Panorama, the learned few would see no harm, provided the proportions were correct; but we ought not to be surprised if the unlearned million should shake their heads in astonishment, and feel no great interest in the mysterious craft.

As, however, in this country at least, there are so many educated men, and as these only are allowed to have or to express any opinion on the matter, it is extremely difficult to get this great fact properly appreciated; and indeed it is difficult to find properly illustrative examples at home; but abroad they crop up occasionally in a manner that shows clearly the true state of the case.

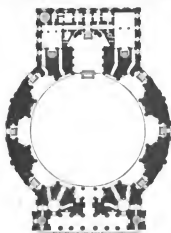
If any one, in passing through Boulogne, will climb up to the "Haute Ville," he will see there a new Cathedral Church (Woodcut No. 8), erected within the last thirty years. It owes its existence almost wholly to the energy and devotion of one man, now Monsignore Haffreingue, who was, however, only a simple Abbé when, in 1827, he conceived the idea of rebuilding the cathedral of his native city, destroyed at the Revolution; and with success such as has seldom crowned a similar attempt since the middle ages, he has lived to see his great work nearly completed. Its dimensions are considerable, being 330 feet long by 112 broad. It is surmounted by a dome 68 feet in diameter internally, and rising to a height of nearly 300 feet to the top of the cross externally. Its proportions are good, and the lighting is pleasing and effectively introduced. The whole is of stone, of an agreeable colour, and the construction is truthful throughout. Yet, notwithstanding all this, the church, to an educated man, is simply horrible. On entering he finds some pillars painfully attenuated, others stumpy beyond all Classical proportions; he sees entablatures put where they have no business to be, and omitted where their presence, according to his rules, is indispensable. The building is, in fact, full of false quantities and errors of grammar, and he is shocked beyond expression at the ignorance it displays in every part. But the inhabitants of Boulogne do not see this. To them it is a more beautiful building than the Walhalla or the Madeleine, because it has the form of a Christian church, which they understand, and because its parts answer the constructive purpose for which they were designed. All this they can see with their own eyes, while they are profoundly ignorant of how these details were used by the Greeks or Romans.

The new parish church of the little agricultural village of Mounsta, in the island of Malta, is perhaps even a more remarkable instance of a building erected in the same manner, and according to the exact principles, which covered Europe with beautiful edifices during the middle ages, though the actual result (like that at Boulogne) and the style are as different from those of a mediæval building as well can be.

It seems that about the year 1812 the villagers first conceived the idea of enlarging their church, and were warmly seconded in the idea by their pastor, the Rev. Felice Calleja. The cholera, and various local misfortunes, again and again diverted the funds that had been collected for this purpose, so that nothing had been done at Calleja's death in 1833, beyond collecting a fund of little more than 3000*l.* for the purpose of rebuilding the church. His successor, Giovanni Schembri, was equally zealous, and, with the assistance of a grant of about 500*l.* a-year for ten years from the funds of the diocese, and the gratuitous labour of the villagers and others, the work was so far completed that, in February, 1860, the parish priest was enabled to announce from the altar that it was time to pull down the old church. Before the following Sunday, not one stone of it remained, and high mass was celebrated for the first time at the altar of the new church.¹

¹ The whole expense was about 21,000*l.*, besides gratuitous labour estimated at half that amount.

The leading idea of the design was that the church should be a copy of the Pantheon at Rome, and was adopted principally because it could be built around and over the old church without interfering with it, in order that the villagers might worship in the church of their forefathers till their new edifice was ready for consecration ;—all which was done.



9. Plan of Church at Monsta.
Scale 100 feet to 1 inch.

Although the merit of the original suggestion of the design is due to a local architect of the name of Grognet, the real architect of the building was the village mason—Angelo Gatt. Like a master-mason in the middle ages, or those men who build the most exquisite temples or tombs in India at the present day, he can neither read, nor write, nor draw ; but, following his own constructive instincts and the dictates of common sense, he has successfully carried out every part of this building. It was

he who insisted on erecting the dome without scaffolding, and showed how it could be done by simply notching each course on to the one



10.

Section of Church at Monsta.

below it. With true Mediæval enthusiasm, this extraordinary man was content to devote his whole time to the erection of this great edifice, receiving only fifteen pence a-day for twenty years. He now receives two shillings, at which he is content to superintend its completion. In every respect, in fact, the building is Mediæval, except one. Instead of Gatt and his brother-masons working in a style which they understood, or which grew naturally out of the forms they were using, in all the ornamental details of their work they were following drawings selected from books by Grognet or some one else; but, as neither he nor they were well versed in the language



11.

View of Church at Mousa. From a Photograph.

of their choice, there are faults of grammar and false quantities apparent everywhere in the building. The villagers, fortunately, are too ignorant to perceive this, and are naturally proud, as they ought to be, of their church and their master-mason. It is sad, however, that a building so noble in dimensions and design¹ should be marred by an attempt to introduce a style of ornamentation which none of

¹ It will be seen from the section (Woodcut No. 10) that the dome is higher internally than that of the Pantheon at Rome, but about

20 feet less in diameter. It, however, exceeds that of St. Paul's, London, by 16 feet.

the villagers understood, and that the dome, which in size ranks third among the Christian domes of Europe, should fail in producing the effect it is entitled to, simply because we have no style but what we borrow from the dead.

Had the designers of this building only got a learned architect to look over their design, and to correct the details, it would have been one of the most beautiful, as it is one of the most remarkable, churches in Europe. It pleases those who worship in it quite as much, or perhaps more, than if its details had been purely Classical; but it is so distasteful to the educated man, that he turns from it more with a feeling of disgust than with anything like the pleasure its dimensions and form ought to produce.

There is still a third example in the cathedral at Gran, now erecting from the designs and at the expense of the Primate of Hungary. Its dimensions are those of a first-rate cathedral, and its general form is pleasing enough; but the mode in which its entablature is cut about and bent over windows, and the details of its campaniles, are painful in the extreme; and, worse than this, the drum of its dome is surrounded by thirty-eight columns, attenuated to such an extent as would justify a spire of almost Gothic form; but instead of this, they are surmounted by a dome of lower section than that of the Pantheon at Rome; and indeed throughout the building there are the same defects of detail which are observable in the two last-named examples.

All this is not so obvious in Gothic as in Classic revivals, for the simple reason that it is easier for an Englishman to express himself in Old English or even Anglo-Saxon—if he chooses to get it up—than in dead or foreign languages. We admire the purity of style and correctness of detail in recent Gothic churches, or in the Parliament Houses, just as we might admire them in St. George's Hall or the Berlin Museum; and we feel convinced that, if Sir Charles Barry or any other of our Gothic architects had been asked for a report on an estate, he could have given it in the exact character and with the same terms as one finds in Domesday Book, or, if desired, in the Early English forms and expressions of the old Exchequer Rolls. Most people would prefer a more modern style of writing or diction; but an archæologist would go into ecstasies if the imitation were perfect. This is, in fact, all we aim at and all we attain in the Architectural Art of the present day. We intrust its exercise to a specially educated class, most learned in the details of the style they are called upon to work in, and they produce buildings which delight the scholars and archæologists of the day, but which the less educated classes can neither understand nor appreciate, and which will lose their significance the moment the fashion which produced them has passed away.

The difference between this artificial state of things and the practice of a true style will not now be difficult to understand. When, for instance, Gothic was a living art in England, men expressed themselves in it as easily as in any other part of the vernacular. Whatever was done was a part of the usual, ordinary, everyday life, and men had no more difficulty in understanding what others were doing than in com-

prehending what they were saying. A mason did not require to be a learned man to chisel what he had carved ever since he was a boy, and what alone he had seen being done during his lifetime; and he adopted new forms just in the same manner and as naturally as men adopt new modes of expression in language, as they happen to be introduced, without even remarking it. At that time, any educated man could design in Gothic Art, just as any man who can read and write can now compose and give utterance to any poetry or prose that may be in him.

Where Art is a true art, it is as naturally practised, and as easily understood, as a vernacular literature; of which, indeed, it is an essential and most expressive part: and so it was in Greece and Rome, and so, too, in the Middle Ages. But with us it is little more than a dead corpse, galvanised into spasmodic life by a few selected practitioners, for the amusement and delight of a small section of the specially educated classes. It expresses truthfully neither our wants nor our feelings, and we ought not, therefore, to be surprised how very unsatisfactory every modern building really is, even when executed by the most talented architects, as compared with the productions of any village mason or parish priest at an age when men sought only to express clearly what they felt strongly, and sought to do it only in their own natural mother-tongue, untrammelled by the fetters of a dead or unfamiliar foreign form of speech.

VII.—ETHNOGRAPHY.

It is not difficult to understand that an art that forsakes the real and natural path of development and follows only a conventional fashion, must lose all ethnographic value, and that those circumstances which not only give such scientific value to the true styles of Art, but lend such an interest to their history, are almost entirely lost in speaking of the architectural styles of the Renaissance. It is this, indeed, which has done so much harm to the history of this art, and prevented it from taking its proper place as a branch of scientific research. A man who sees an Egyptian obelisk being erected in front of a Grecian portico in Portland cement, alongside of a new Norman parish church, to which they are attaching a schoolroom in Middle Pointed Italian, and the whole surrounded by Chinese and Saracenic shop-fronts, is certainly justified in doubting whether there is really such a thing as the Ethnography of Architectural Art. It is necessary that he should have looked beyond the times of the Reformation, that he should be familiar with those styles which preceded it in Europe, or with those which are now practised in remote out-of-the-way corners of the world, before he can shake off the influence of this false school of teaching. Unfortunately it is only a few who have either the opportunity or the inclination to carry this through to its legitimate conclusion; hence the difficulty not only of restoring the art to the dignity of a science, but, more than this, the impossibility of making it a living and real form of artistic utterance.

If there is any Ethnography in modern Art, it is this—that during

the fifteenth and sixteenth centuries the Teutonic and more purely Aryan races assumed in Europe an importance and achieved a position which they had not before attained to. By that time the old artistic Turanian blood had either died out or been absorbed, and even the Celtic races had lost that predominance which they had hitherto possessed; and from that hour the Celtic blood has been gradually becoming more and more mixed, or less and less prevailing.

The result of this may be a prevalence of more matter-of-fact, common-sense ideas, better government, and more reasonable proceedings in all the arrangements of life; but, unfortunately, at the expense of all that poetry, all that real love of Art, which adorns a more imaginative state of society. It is a fact that, wherever Teutonic, or, as we call it, Anglo-Saxon influence has extended, freedom and wealth and all the accompanying well-being have followed in its train, but unadorned with those softer graces or poetic imaginings which it is sad to think have never yet coexisted with sober common sense.

Although therefore we must abandon, to a very considerable extent at least, all idea of tracing the ethnographic relation of nations by means of their Art in modern times, and though the study of modern Architecture consequently loses much of its value, still, on looking below the surface, we detect the existence of another class of phenomena almost as interesting to the philosophical student. This is the exhibition of the wonderful and enduring influence which education can exercise, not only on individuals, but on nations.

In the whole history of the world there is perhaps no such extraordinary instance of what education can do, as that of the state of Architecture since the beginning of the sixteenth century. At that time men forsook the principles on which this and all other cognate arts had been practised from the beginning of time; they forsook common sense and common prudence, not in the hope of attaining greater convenience or greater effect, more easily, or with less means, but in order to reproduce certain associations with which education had made them familiar. At one time it is Republican Greece, at another Imperial Rome, now it is the barbarous Middle Ages, none of which we have any immediate affinity for or relation with, but for which we are willing to sacrifice convenience and economy, and to spend absurd sums of money in reproducing what we know will be contemptible before it is half a century old, and what we feel is most inconvenient at the present hour.

As remarked above, something like this took place in literature a century ago, and, though we may now regret, we do not blame it, because literature is a luxury. But Architecture is a necessary art. We can exist without poetry; we cannot live without houses and public buildings. What makes it more remarkable is that, while education has so far loosed her hold on literature that we now write poems and tell tales after our own fashion, and to please ourselves, without thinking of Classical or Mediæval models, we should still decorate buildings for no other purpose than to conjure up associations with which we have no relations except those derived through education.

VIII.—CONCLUSION.

The foregoing remarks will, it is hoped, be sufficient to show that the styles to be described in the following pages differ, not only in form, but more essentially in principle, from those which have hitherto occupied our attention, and that new principles of criticism and new laws of taste must be adopted in attempting to estimate their respective merits.

These in fact are so difficult that, whenever a question arises, most men shelter themselves under the maxim, "*De gustibus non est disputandum*:" a maxim which can have no possible application when speaking of a true style of Art, but which comes painfully into play when we are called upon to estimate the products of individual talent, or to reprobate the indulgence of individual caprice.

When judged from their own point of view, we never can hesitate for a moment in estimating the relative value of any production of the Egyptian, the Classical, or Mediaeval schools; their purposes are seen at a glance, and how far they succeeded or failed in attaining what they aimed at easily estimated: but when it is a question whether Egyptian, or Classic, or Gothic designs are to be adopted for modern English purposes, then indeed *de gustibus est disputandum*; or when we are called upon to appraise the relative merits of Wren or Inigo Jones, of Chambers or of Adams, of Pugin or of Barry, or to determine whether art has progressed or receded in the period that elapsed between the two first and the two last named architects, all is not only perplexing and difficult, but most unsatisfactory in its result. But even this is not all. We have got to deal with an art which is not conducted on truthful or constructive principles, but on imitative attempts to reproduce something which has no real affinity with the building in hand; with an architecture which occupies itself almost exclusively with the meaner objects of domestic and civil wants, instead of the more elevated aims of templar or ecclesiastical buildings; with a style of building where the interior and the internal arrangements are almost everything, and the exterior, which is the true place for architectural display, may be anything, and consequently generally is a sham; with an art whose utterances, whether Classic or Gothic, are the products of the leisure of single minds, not always of the highest class, instead of with an art which is the result of the earnest thinking of thousands of minds, spread over hundreds of years, and acting in unison with the national voice which called it into existence; we are describing an art which is essentially Technic in all its forms, but which is now conducted on principles which are only applicable to the Phonetic arts—two classes as essentially distinct in their principles as any two arts can well be supposed to be.

All this is discouraging enough, but still it is our Art. It is that which covers all Europe, and adorns every city of the world, with its productions; and it cannot therefore be uninteresting to us as a psychological study, or as a manifestation of the mind of Europe

during the period of its greatest cultivation and highest excitement. It is doubly interesting to try and master its meaning, and even to acquire a knowledge of its defects, for it is only by so doing that we can hope to avoid the errors of our forefathers; and if it should be possible that Art may again become a true and living utterance of the human mind, it is only by knowing what the art once was, what it now is, and the process by which it sank to its present position, that this result can possibly be attained.

There are so few symptoms of more correct ideas on this subject prevailing in the public mind, that it may be foolishly sanguine to hope that Architecture can ever again be restored to the position of a truthful and real art; but the object is so important that it is childish to despair, and wicked not to do what can be done to bring about an object in every respect so desirable. .

BOOK I.—ITALY.

CHAPTER I.

ECCLESIASTICAL.¹

I. CHURCHES ANTERIOR TO ST. PETER'S. — II. ST. PETER'S. — III. CHURCHES SUBSEQUENT TO ST. PETER'S. — IV. DOMICAL CHURCHES. — V. BASILICAN CHURCHES. VI. EXTERIORS. — VII. INTERIORS.

I.—CHURCHES ANTERIOR TO ST. PETER'S.

THE influence of the grand old style of Classical Art clung so tenaciously to the soil of Italy, that it would be extremely difficult to determine when the modern epoch really commenced, were it not for the two great tests enumerated above :—First, that all buildings of the modern styles are, or must at least attempt to be, copies of some more ancient building, or in some more ancient and obsolete style ; and, secondly, that they must be the production of one individual mind, and of that mind only.

Were it not for this, such buildings as San Miniato at Florence, and some of the basilicas at Rome, are in fact more Classical in plan, and—as their ornaments are generally borrowed from ancient buildings—far more so in detail, than many of the buildings of the Renaissance period. Their builders, however, were only thinking of how they might produce the best possible church for their purposes with the materials at their disposal, and not caring to glorify themselves by showing their own individual cleverness : we consequently study these agglomerations with nearly the same interest as we do a northern cathedral, and approach them with very different feelings from those we experience in examining churches of more modern date.

It was, however, impossible that in a country which was everywhere

¹ In the 'Handbook of Architecture' Ecclesiastical Art was treated separately from Secular, and, as the principal and most important form, always took precedence of the other. The same course is pursued in this work in so far as Italy, Spain, and France are

concerned ; but, as the other countries hardly possessed an Ecclesiastical Art, properly so called, during the Renaissance period, it would be pedantic to follow out a division of the subject which has in effect no reality.

strewed with specimens of ancient Art, and where the Classical spirit was more or less impressed on all such churches as then existed, the Italians could long escape from attempting to reproduce, exactly and intentionally, what they were repeating accidentally; especially as their Mediæval Architecture had never attained the perfection to which the Pointed style had reached on this side of the Alps, and never had taken any real hold on the feelings of the people. Besides this, the Classical style was their own, invented in their country, suited to their climate, and to a certain extent to their wants: so much so that whatever little inconvenience might arise from its adoption was more than compensated for by the memories which every detail called up, and the attempt to rehabilitate which was the guiding idea of all the aspirations of that age.

This being so, it was an inevitable consequence that Classical Architecture should supersede Mediæval in that country at some time or other; and the occasion, as mentioned above, was when the revival of the literature of the Romans recalled the recollection of the greatest nation that Italy, and in some respects that the world, had ever seen. Sooner or later it must have come to this; but practically the change was introduced by Filippo Brunelleschi¹ and Leon Battista Alberti,² two of the most remarkable men of their day.

The former, a Florentine by birth and an architect by inclination, early conceived the ambition of doming over the great octagon of the cathedral of his native city, which Arnolfo and Giotto had left unfinished, and, according to the usual practice of the Middle Ages, without even a drawing to show how they intended to complete it. They seem to have felt confident they could roof over even that space, and, if this confidence was justified, they wisely left the exact mode in which it should be done undetermined to the last moment, so as to benefit by all the study and all the experience that could be gained in the interval; for it must be remembered that in their age Architecture was a true and consequently a progressive art. Had it continued to be so, they were perfectly right in assuming that every year's experience in building would have indicated how the mechanical difficulties of the task could have been overcome, and every day's additional study, or additional knowledge of architectural efforts, would have shown how it could be done most artistically. They are not to blame that they could not foresee the collapse that immediately afterwards took place, and which forced this art into the path where progress was impossible, and where their aspirations could never be fulfilled. Brunelleschi took it up at the dawn of a new era, in a totally different sense from that in which its original designers had left it; but, convinced that it was the greatest opportunity for his purposes which his age presented, he pursued this object through life with a fire and energy which can only be realized by the hot blood of the South.

As mentioned in a former part of this work,³ there is no great diffi-

¹ Born 1377; died 1444.

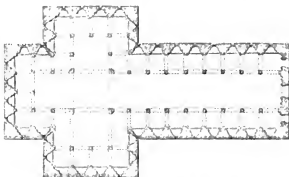
² Born 1404; died 1472.

³ 'Handbook of Architecture,' page 775.

culty in seeing what Arnolfo intended to do with the great octagon, and as little doubt but that he would have been able to cover the space with a dome, somewhat similar internally to that executed by Brunelleschi, but externally ornamented with three or four tiers of galleries, which would have counteracted any thrust, and made its construction comparatively easy. It appears, however, that, in the beginning of the fifteenth century, a less expensive or a more Classical form of dome was demanded, but no one seemed to know exactly how to set about it. Under these circumstances Brunelleschi went to Rome, and studied with the most intense enthusiasm not only the dome of the Pantheon and all the other vaults which the Romans had left in that city, but, becoming enamoured of his subject, he mastered every detail of the style, and became familiar with every form of Roman Art.

In the year 1420 he returned to his native city, thoroughly a Classic in all that referred to Architecture; and not only did he, after innumerable complications, complete the great object of his life before he died in 1444, but he left his mark on the Architecture of his age.

His first great undertaking in the new style was to complete the church of San Lorenzo, a large and important building in his native city, but which was considerably advanced when it fell into his hands. It is 260 ft. in length by 82 in width, with transepts 171 ft. from side to side. No church can be freer from bad taste than this one; and there is no false construction, nor anything to offend the most fastidious. Where it fails is in the want of sufficient solidity and mass in the supporting pillars and the pier-arches, with reference to the load they have to bear; and a consequent attenuation and poverty most fatal to architectural effect. This church, though very similar, is on the whole inferior in beauty to that of Santo Spirito, which being entirely according



12.

Plan of Santo Spirito, Florence. Scale 100 feet to 1 inch.

to Brunelleschi's design, he was enabled to mould it to his own fancies much more completely than he could the other. This church, too, is rather larger, being in plan (Woodcut No. 12) 296 ft. long by 94 ft. 3 in. wide, and, taking it all in all, is internally as successful an adaptation of the basilican type as that age presents. The design shows how



13. Section of part of Church of Santo Spirito, Florence. Scale 50 feet to 1 inch.

complete a mastery its architect had obtained at Rome over that peculiar form of church, not usually prevalent in Italy, except at Rome and Ravenna, as well as over the details of the Classical style, which are here used with singular elegance and purity. What is perhaps principally to be objected to in the design is the fragment of the entablature which is placed on each column under the springing of the pier-arches (Woodcut No. 13), which in this church has not even the excuse it has in San Lorenzo, that it is repeated on the wall. It is, however, worthy of being remarked here as the earliest instance of the use of one of the typical forms of the Renaissance, which is, taking it all in all, perhaps the most fatal gift of Classic Art to modern times, as nine-tenths of the difficulties and clumsinesses of the revived Art are owing to the introduction of this feature. The first thing the architects of the fifth and sixth centuries did was to abolish this fragment of an entablature, and place the arch direct on the pier or pillar, where it ought to be; and the advantage of this proceeding is so self-evident that it seems strange that it could ever have been restored. No single feature can more clearly mark the dawn of copying, to the exclusion of thought, than its reproduction.

Another of Brunelleschi's most admired works is the very elegant little octagonal church Degli Angeli, which, besides being so small as to be insignificant, never was finished. There are several other churches by this architect which may have influenced the taste of his contemporaries, though they have added little to his personal fame.

Alberti was led to the study of Classical Art by a totally different path. Being nobly born, he received the best education that the

country could afford, and became so enamoured of the literature of the Romans that he adopted Latin, not only as the language in which he wrote, but almost as that of his conversation; and having besides a taste for Art, and a mechanical turn of mind, he naturally turned his attention to the restoration of the Classical style. In order to forward this, he wrote a Latin treatise '*De Re Edificatoria*,' which is still a text-book on the subject, and practically he carried out some designs which, in so far at least as the exteriors are concerned, were further in advance of his age than even those of Brunelleschi.

The best known and most admired of these is the church of San Francesco at Rimini (Woodcut No. 14), built for his friend Sigismondo



14. View of the Church of St. Francesco at Rimini. From Gally Knight's '*Italian Architecture*.'

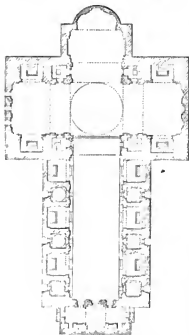
Malatesta, who, besides wishing to erect a beautiful church, conceived the pathetic idea of making it a mausoleum for those friends he had gathered around him during his lifetime, and who he hoped might repose side by side with him after his death. It was in order to carry out this intention that the sides of the church were arranged as a series of grand niches, each of which was to contain a sarcophagus of Classical design. The façade was never finished, but is quite as elegant and as purely Classical as any of those afterwards erected by Palladio, and in some respects in better style; the whole being in good taste, and the parts combined together with great elegance and appropriateness, besides being free from any anomalies either of construction or detail.¹

Alberti also erected the more important church of St. Andrea at

¹ The interior was built before it fell into Alberti's hands, and is about as bad a specimen of the clumsy Gothic of the Italians as can

well be conceived, and a perfect justification to those who rejected that style to adopt the Classical.

Mantua, which, though hardly so elegant as that last mentioned, is even more interesting in an historical point of view, as being the type of all those churches which, from St. Peter's downwards, have been erected in Italy and in most parts of Europe during the last three centuries. It differs, it is true, only in degree, either in plan or section, from the earlier Gothic churches; but the pilasters along each side of the nave, the coffered waggon vault, the form of the dome over the intorsection of the nave and transept,¹ are all features which



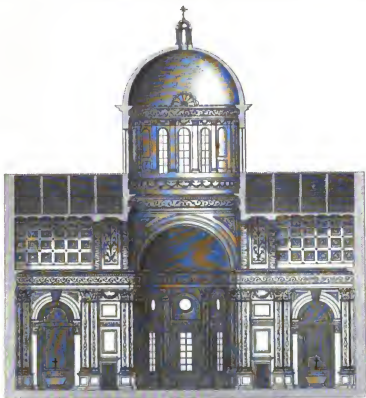
15. Plan of St. Andrea at Mantua.* From Agincourt.
Scale 100 feet to 1 inch.

are for the first time fully developed in the positions in which we here find them, though we become so painfully familiar with them afterwards. In this instance, however, they are used with very great elegance, and combined with as much appropriateness as it is almost possible to conceive. The church being practically without side aisles, the pilasters, which are usually the great difficulty, appear to rest against the wall, and not as if they were applied to make up part of a pier, as is usually the case.

The dimensions of the church (Woodcut No. 15) are considerable, being 317 ft. long internally, and the nave and transepts are each 53 ft. wide by 95 in height, but owing to the simplicity of the parts it appears even larger than it really is. The great charm, however, is the beauty of its proportions, the extreme elegance of every part,

and the appropriateness of the modes in which Classical details are used, without the least violence or straining. Most of the smaller ornaments have been painted on in quite recent times, so that it is not clear how many of them are parts of Alberti's original design; and their principal defect is that they are more secular than ecclesiastical in their character. This does not destroy the effect of the architecture, though it detracts somewhat from their own appropriateness; but, allowing for this defect, there is probably no church in Italy so entirely satisfactory as this; and, considering the early date of this specimen, it is

¹ It is said the dome was built afterwards. It may be so, but it was so evidently a part of the original design, that whether erected then or not is of little consequence.



16.

Section of St. Andrea, Mantua. From Agincourt. Scale 50 feet to 1 inch.

marvellous how Palladio and others could have gone so far astray with such an example before them.

The exterior never was finished, except the entrance front (Woodcut No. 17), and that is worthy of the interior. Nothing in the style is grander than the great central arch, well supported on either side, and crowned by a simple unbroken pediment. The external order also ranges with the internal, and with the crowning member of the side aisles externally, so that there is no sham and no false construction: it is avowedly a porch, appropriate in style and dimensions to the church to which it is attached. There may be a little awkwardness in the side doors of the porch not being opposite to those leading into the nave, but the motive is so evident that it is not offensive.



17. Elevation of Porch of St. Andrea, Mantua.
Scale 50 feet to 1 inch.

The church of St. Sebastian, also at Mantua, was erected by Alberti, but is by no means so happy in design, and in its present dilapidated condition cannot be quoted as a pleasing specimen of Art, though there are some features about it that mark the master mind.

Whether it was the especial ability of these two men, or the circumstance of their applying their minds fresh from the study of the antique to the new form of Art, or from some other cause, it certainly happened that the new style was launched under singularly favourable circumstances; and if it afterwards strayed further from the right path, it was not owing to the architects under whom it was inaugurated, but to circumstances which will be noted in the future.

Alberti died in 1472; consequently both these great revivalists were dead, and Gothic Art had perished in Italy, some time before our Henry VII. ascended the throne, and more than half a century before the Pointed style ceased to be the only form of Architecture known or practised within these islands.

The next architect whose works had any marked influence on the progress of the new style was Bramante d'Urbino.¹ Born in the same year in which Brunelleschi died, he seems to have inherited not only his genius for the art, but the same impetuosity of disposition, and, by a curious coincidence, was the designer, and was nearly being the builder, of the only dome in the world which, for size and difficulty of execution, can rival that of his predecessor.

Though he was the architect of several secular buildings which will be mentioned hereafter, the only church wholly by him which now exists, and which is recognised as remarkable, is that outside the walls at Lodi (shown in plan, section, and elevation, in Woodcuts Nos. 18, 19, 20). Though neither very large nor very elaborate in its decoration, it is a very beautiful church, and forms a perfect pendant to Alberti's church at Mantua; the one being the earliest and best type of the Basilican, as the other is of the Domical or Byzantine form of the Renaissance. When these two were finished the change from the Mediæval to the Modern style may be said to have been completed,

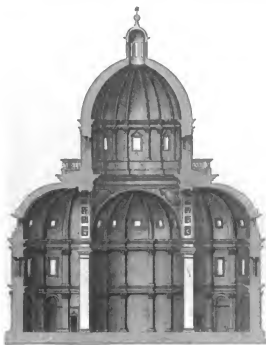


18. Plan of Church at Lodi. Scale
100 feet to 1 inch.

and under the most favourable auspices. All that then remained to be done was gradually to invent new details to supply the place of the borrowed Classical ones, and a new and nobler style might have been invented. The opposite course was pursued; stereotyped forms only were tolerated, invention was discouraged, and the art decayed; but this was not the fault of the earlier architects, but of those who followed afterwards.

¹ Born 1444; died 1514.

The church at Lodi consists of a dome, 50 ft. in diameter internally, and about three times that height. For external effect this is far from being too much; and although internally it certainly is too high in proportion, the defect is remedied, to a very great extent, by the introduction of four semi-domes, attached to the sides of the square supporting the central dome, and which make together an apartment 125 ft. wide by 150 in height. If these figures had been reversed it would have been better, but the proportion is so nearly good that the difference may be overlooked; especially when we observe how much



19.

Section of Church at Lodi. Scale 50 feet to 1 inch. From Agincourt.

the Gothic style had introduced a taste for height as one of the principal elements of Architectural grandeur. It may also be remarked that this building is more truthful in its construction than any Gothic building we are acquainted with, there being no false roof or false construction of any sort. The real defect of the design is that the ornamentation consists almost wholly of ranges of pilasters, which cover the walls both externally and internally, and by their small size and want of meaning detract much from what would otherwise be really a very beautiful design.

Another very celebrated and more successful design of Bramante, or



20. Elevation of Church at Lodi. Scale 50 feet to 1 inch. From Agincourt.

at all events of his age, is the dome he is said to have added to the existing Gothic nave of Sta. Maria delle Grazie (Woodcut No. 21) at Milan, and which, both externally and internally, is one of the most pleasing specimens of its class found anywhere. Had the architects of the succeeding age been only content to work with the moderate amount of Classical feeling found in this building, we should have had no cause to regret the loss of the Gothic style; but the temptation to employ great pilasters and pillars, whose real recommendation was that they covered the greatest amount of space with the least amount of thought, was more than human nature could resist, on the part, at least, of men who were more artists and amateurs than architects. Under the pretence that they were truly Classic, they consequently soon became fashionable.

The dome of Sta. Maria is 65 ft. in diameter, to which are added three semicircular tribunes, smaller in proportion to the dome than those found at Lodi. Internally there are no exaggerated features to destroy the harmony of the parts, and the whole system of ornamentation employed is pleasing in detail, and appropriate to the situation where it is found, and only wants a little colour, which might now be applied, to give it a most pleasing effect. Externally, the square mass on which the dome rests is hardly sufficiently relieved by the projection of the tribunes; though this is a far more pardonable defect than that which

is found at St. Peter's, and generally in the Domical churches of the Renaissance, where the supports of the dome are so concealed by the body of the church as nowhere to be visible externally. In this instance the whole rises most pleasingly from the ground, and the ornamentation is everywhere truly constructive. Some of the details are overdone, and might have been simplified with advantage; but the whole is extremely elegant and satisfactory. The greatest defect of the design is perhaps the crowning member. Either the circular form of the dome ought to have been shown externally, or the straight-lined roof carried forward over the areade, so as to be perpendicular over the rest of the structure. As it is, the want of projection and shadow at this point breaks up the whole, and gives rise to an appearance of weakness, which is very disagreeable.



21.

Santa Maria delle Grazie, Milan. From a Photograph.

There is another small circular chapel by the same architect in the cloister of San Pietro Montorio at Rome. As its internal diameter is scarcely 15 ft., it can hardly be considered worthy of mention except as showing the taste of the designer, and how completely, in its circular peristyle, he had caught the elegance of the Classical style; but even then it is not equal either in taste or originality to his design at Lodi.

F

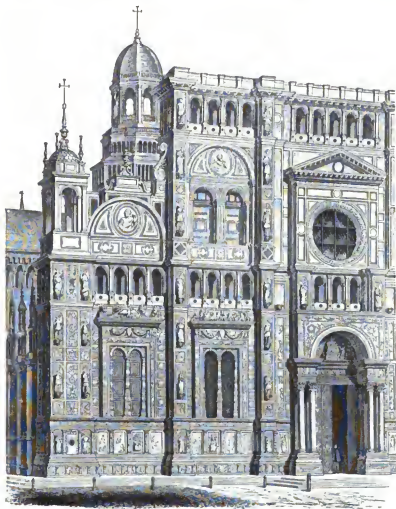
Perhaps, however, the most celebrated building of this age is the façade of the Certosa at Pavia; and if we are content, as the Italians were, that the façade shall be only a frontispiece, suggesting rather than expressing the construction of the church behind it, this is certainly one of the most beautiful designs of the age. It was commenced in the year 1473, from designs prepared by Burgognone, a Milanese artist of some eminence at that time, but whose works here show how much more essentially he was a painter than an architect. They are thus interesting as an early instance of the danger of the practice of intrusting to men of the brush, works which can be executed properly by those who have all their lives been familiar with only the chisel and the trowel. The façade was not, however, completed till very long after his death, if, indeed, it can be said to be so even now, though the original design does not seem to have been ever departed from.

The façade consists of five compartments, divided vertically by buttresses of bold and appropriate form; the three centre divisions representing the body of the church, with its aisles, the outer one the side chapels of the nave. Horizontally it is crossed by two triforium galleries—if that name may be applied to them—one at the height of the roof of the aisles, the upper crowning the façade, and reproducing the gallery that runs round the older church under the eaves of the great roof. All these features are therefore appropriate and well placed, and give relief with light and shade to the composition, to an extent seldom found in this age. The greatest defect of the design as an architectural object is the amount of minute and inappropriate ornament which is spread over the whole of the lower part of the façade, up to the first gallery.

As mentioned in the Introduction, Painting was the art, *par excellence*, of the Renaissance age, and both Sculpture and Architecture suffered from her undue supremacy. Sculptured bassi-relievi were generally little more than pictures in relief, and Architectural ornaments were too often merely copies of painted arabesques. Those of this façade are identical with those with which Raphael was then adorning the Loggie of the Vatican; and however beautiful they may be as a painted decoration for an interior, they are singularly out of place and inappropriate as architectural ornaments on an exterior. In themselves, however, they are beautiful, and they captivate by their delicacy, and the expression of elaboration which they convey from the infinite labour they so evidently must have cost; but beyond this the design would have been infinitely better without them.

The erection of the cupola on the intersection of the nave and transepts of the Certosa was commenced and carried on simultaneously with that of the façade; and is not only a very beautiful object in itself, but is interesting as being the only important example of a Renaissance copy of the form of dome used by the Italians in the Medieval period. An example of the Gothic form, as found at Chiaravalle, was given in a previous part of this work.¹ The lower part of

¹ 'Handbook of Architecture,' Woodcut 629.



22. View of Western Façade of the Certosa, near Pavia. From Rosengarten.

this design is quite as beautiful as that, if not more so; but it is overpowered by the cupola, which crowns the whole, and which was put there at a time when largeness of details was believed to contribute to grandeur of effect, though generally producing, as it does here, a diametrically opposite result. It is infinitely to be regretted that Brunelleschi did not translate Arnolfo's design into Classical forms, as was done in this instance, instead of trying to copy the simple but unsuitable outline of the Pantheon.

It would be tedious, as it would be uninteresting, to enumerate the

other churches built in Italy during the fifteenth century. They are generally insignificant in size, as the piety of the Middle Ages had already endowed all the principal towns with churches sufficient for the wants of the inhabitants at that particular period. Their style was practically the same as that of those described above, but, being frequently built under the direction of men of less talent or less knowledge than the architects just named, they are generally inferior in design, halting painfully between the two styles, and, as is usually the case in such circumstances, selecting the defects rather than the beauties of either.

Those just described—Santo Spirito at Florence, San Andrea, Mantua, that at Lodi, and Santa Maria, Milan, with the façade of the Certosa at Pavia—may be taken as types of the true Cinque-cento period, and show how essentially, even at that early period, the Italian architects had got rid of all Gothic feeling, and how completely they had mastered that peculiar application of the Classical details to modern purposes which formed the staple of Architectural Art in Europe for the succeeding three centuries.

They also show how much more thought and care the traditions of Mediæval Art rendered it necessary that the architects at the dawn of a new age should devote to their designs, than the Painters and Sculptors who assumed the position of architects in the following centuries were either able or thought it incumbent on them to devote to the elaboration of buildings intrusted to their charge.

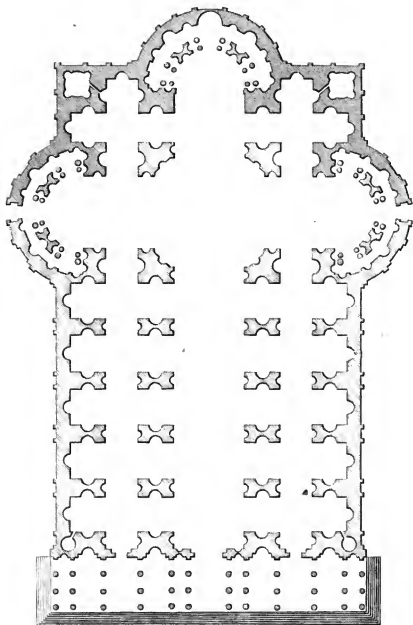
II.—St. PETER'S.

It will be perceived from the examples just quoted that all the elements of design which were afterwards found in the churches of the Renaissance had already been introduced during the fifteenth century, and that, if any great building of an ecclesiastical character were afterwards to be erected in Italy, we could easily predicate what form it would almost of necessity take.

An opportunity was not long wanting; for the old basilica of St. Peter's, built in haste, in a bad age, was fast falling to decay; and, notwithstanding that it was larger than any Mediæval cathedral,¹ it still was felt to be unworthy of being the principal church of Europe. In consequence of this, Pope Nicholas V. commenced a new building, from the designs of Rosselini, on such a scale as would—had it been completed—have made it the greatest and most splendid cathedral of Europe, as essentially as the Pope was then the greatest high priest that the world had ever seen. His designs have not been preserved, and the only part which was executed was the western tribune, which occupied the same place as the present one, but was only raised a few feet out of the ground when the Pope died in 1454.

There the matter seems to have rested for more than half a century, and no one seems to have thought of carrying out the conception

¹ 'Handbook of Architecture,' p. 448.



23.

Plan of St. Peter's as proposed by Bramante. From Bonanni.

of Nicholas, till the project was revived, almost accidentally, by Pope Julius II. That pontiff, having commissioned Michael Angelo¹ to execute a splendid mausoleum to contain his ashes, on a scale so large that no church or hall then existing could receive it, bethought himself of the tribune of Nicholas, as a fit and proper place for its erection. Having once had his attention called to the subject, he not only determined to fit it up for this purpose, but to carry out the design of his predecessor, on a scale at least equal to the original conception.

Bramante, who was then in the plenitude of his practice and the zenith of his fame, was instructed to prepare the designs; and although we have not all the details requisite to form a judgment as to their merits, we may safely say that it is to be regretted they were not adhered to by subsequent architects.

The accompanying plan (Woodcut No. 23) will explain what he proposed. Beginning on the west,² with the tribune of Nicholas, he proposed to place in front of it, at a distance of 275 feet to its centre, a dome, equal in diameter, and similar in design, to that of the Pantheon, only that he proposed to surround it externally with a peristyle of pillars, and to surmount it by a lantern.³ This was to be the central point of three tribunes, the one already commenced, and two others north and south, at the extremities of the transepts; a disposition which has been adhered to by all subsequent architects, and now exists. To the eastward he proposed to add a nave 400 feet each way, divided into three aisles, and extending to five bays in length east and west. In front of this was to be a portico of thirty-six pillars, arranged in three rows, but unequally spaced. Another design of his, which we find commemorated in some medals, has two spires on this front, and between them a portico of only six pillars.

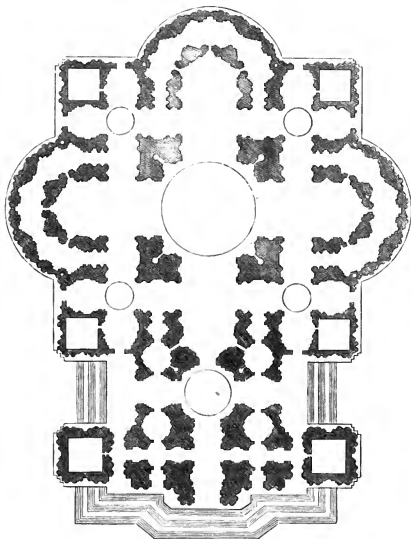
The foundation stone of this great church was laid in the year 1506, and the works were carried on with the greatest activity during the following seven or eight years. On the death of Pope Julius II., in 1513, and that of his architect in the following year, the celebrated Raphael was appointed to succeed him. Although that great painter was an accomplished architect, in the sense in which that term was then becoming understood, the task he was now appointed to, was as little suited to his taste as to his abilities. So great had been the haste of the late Pope, and so inconsiderate the zeal of his architect, that, though the great piers which were to support the dome had only been carried to such a height as to enable the arches to be turned which were to join them, they already showed signs of weakness, and it was evident they must either be rebuilt from the basement, or very considerably reinforced, if ever a dome was to be placed on them. While men were disputing what was best to be done, Raphael died,

¹ Born 1474; died 1564.

² The orientation of St. Peter's is the reverse of that of northern cathedrals—the western apse containing the principal altar; but, as is well known, the practice of turning the altar in churches towards the east was

never introduced into Italy.

³ The centre of this dome was to coincide with the central point of the apse of the old cathedral, and the confessional beneath it was to be, and is, retained in this place at the present day.



24.

Plan of St. Peter's as proposed by San Gallo. From Bonanni.

in 1520, and Baldassare Peruzzi¹ was appointed to succeed him as architect.

He, fearing that the work would never be completed on the scale originally designed, determined at once to abandon the nave of Bramante, and reduced the building to a square enclosing a Greek cross—

¹ Born 1481; died 1536.



23. Elevation of East Front of St. Peter's according to San Gallo's design. From Bonanni.

to a design in fact similar to that of the church at Lodi (Woodcut No. 18)—only with the angles filled in with square sacristies, which were to be each surmounted by a dome of about one-third the diameter of the great one, being in fact the arrangement then and subsequently so universal in the Russian churches. Before much was done, however, he died, in 1536, and was succeeded by the celebrated Antonio San Gallo.¹ He set to work carefully to re-study the whole design, and made a model of what he proposed, on a large scale. This still exists, and, with the drawings, enables us to understand exactly what he proposed; and although no part of it was executed, it is so remarkable that it deserves at least a passing notice.

He adopted in plan the Greek cross of Raphael and Peruzzi, which probably was too far advanced to be altered, but he added in front of it an immense pronaos, about 450 feet north and south, and 150 east and west, and consequently as large as most Mediaeval cathedrals (Woodcut No. 24). This was the great defect in his design; for though it was beautiful and picturesque, and with its two steeples would have grouped pleasingly with the dome, still it was entirely useless. It did

¹ Born 1470; died 1546.

not add to the internal accommodation, like the nave of Bramante, and in fact was a mere ornament, except for the one chamber over the entrance, from which the Pope's blessing was to be given.¹

The principal merit of his design is the ordinance of the exterior (Woodcut No. 25). This consists of a Doric Order, representing the side aisles. Over this is an immense mezzanine, and over this again an Ionic Order, with arches between. Although the façade is so broken up that these parts look a little confused as distributed there, nothing can be grander than the sweep round the tribunes. If he had had the courage to set back his upper Order to the inner side of the aisles, as shown in the diagram (Woodcut No. 26), and made it into a true clerestory, round the three circular apses and along the nave—thus giving his mezzanine a meaning, by making it represent the roof of the aisles on the angles and under the towers—he would have produced a design which it would have been difficult for even the Gothic enthusiasts of the present day to criticise. This would also have remedied what is practically the principal defect of all these great domical churches; which is, that the dome seems to stand on, or be thrust through, the roof. Had the clerestory been thrown back here, the square base of the dome would have been in appearance brought down to the ground-line like a Gothic steeple on the intersection of the nave and transept of a Mediæval cathedral. The whole would then have risen, naturally and constructively, step by step, from the ground to the lantern on the top, and, with the simpler lines and more elegant details of Classic Art, a far more pure and majestic building would have been the result than any Gothic cathedral we have yet seen. If, in addition to this, we take into consideration that the section of the clerestory was intended to have been at least 150 feet from side to side, while that of Cologne is only one-third of that dimension, and that the intersection would have been crowned by a dome of such dimensions that the central tower of Cologne would hardly be big enough to be its lantern, it may easily be conceived how nearly all the elements of architectural sublimity were being reached.

It does not appear that much was done towards carrying out this design. All San Gallo's time, and all the funds he could command, were employed in strengthening the piers of the great dome, and in remedying the defects in construction introduced by his predecessors. His design, besides, does not seem to have met with much favour among his contemporaries, and with the greatest opposition from Michael Angelo, whose criticism was "that it was broken into too many parts, and with an infinity of columns would convey the idea of a Gothic building rather than of an antique or Classical one;"² a remark

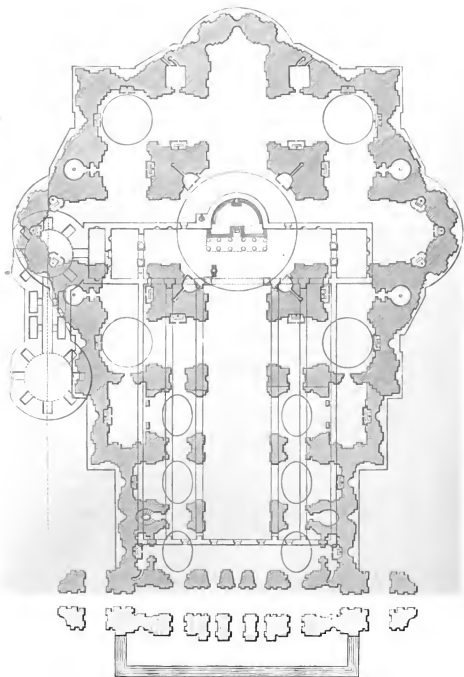


26. Diagram suggesting arrangement of aisles in San Gallo's elevation.

¹ It is more than usually interesting to us, as will be shown hereafter; inasmuch as this pronos was the feature which Sir C. Wren

selected principally for imitation in his own first and favourite design for St. Paul's.

² Militizia, 'Vita di Antonio San Gallo.'



27. Plan of St. Peter's as it now exists. Scale 100 feet to 1 inch. With Plan of old Basilica in outline.

that conveys only too exactly the feelings of that age, though it would hardly be considered its worst condemnation at the present day, nor does it appear justified by a study of the design.

At San Gallo's death, in 1546, the control of the works fell into the hands of Michael Angelo; and although he did not and could not alter either the plan or general arrangement of his predecessors to any material extent, he determined at once to restrict the church to the form of a Greek cross, as proposed by Peruzzi and Raphael, and he left everywhere the impress of his giant hand upon it. It is to him that we owe certainly the form of the dome, and probably the ordinance of the whole of the exterior.

In spite of intrigues and changes in the administration, this great man persevered in an undertaking in which his heart and his honour were engaged; and at his death, in 1564, had, like Brunelleschi his great predecessor in dome-building, the satisfaction of seeing his dome practically completed; and he left so complete a model of the lantern, which was all that remained unfinished, that it was afterwards completed exactly as he had designed it. The only part of his design which he left unfinished was the eastern portico. This he proposed should be a portico of ten pillars standing free, about one diameter distant from the front of the façade, and four pillars in the centre, the same distance in front of these. There would have been great difficulty in constructing such a portico with an "Order" exceeding 100 ft. in height; and it is feared it would have lost much of its dignity by the wall against which it was to be placed being cut up, by niches and windows, to the extent to which Michael Angelo proposed should be done. Fontana,¹ after his death, proposed to reduce the back range of pillars to eight, leaving the front four; and made some other alterations which were far from improvements. Nothing was done to carry out either design, and during the pontificate of Paul V. it was suggested that the portico should be carried forward to where the front now is, and a nave inserted between them, making the building again a Latin cross, as originally suggested by Bramante.

This idea was finally carried into effect by Carlo Maderno,² a very second-class architect, in the beginning of the seventeenth century, only that he was afraid to attempt a portico of free-standing columns, and plastered his against the wall, as they now stand. The annexed plan (Woodcut No. 27) represents the building as it now exists. The work of Maderno is distinguished by a different tint from that of Michael Angelo; and the plan of the old Basilica is also shown in outline, in order that their relative dimensions and positions may be understood.

About the year 1661 Bernini³ added the piazza, with its circular porticoes and fountains, thus completing, as we now see it, a building which had been commenced more than a century and a half before that time, and which, with all its faults, is not only the largest but the most magnificent temple ever raised by Christians in honour of their

¹ Born 1543; died 1607.

² Born 1556; died 1629.

³ Born 1598; died 1680.



26. Elevation of the Western Apse of St. Peter's. Scale 100 feet to 1 inch.

religion; and was only prevented from being the most beautiful by the inherent vices of the school in which it was designed.

It would be difficult, in modern times, to find names more illustrious than those who were successively employed to carry out this design. Money was supplied without stint, and all Europe was interested in its completion. The best of building-stones were available on the spot, and the most precious marbles were employed in its decoration. Painting, sculpture, mosaics, whatever could add to its richness or illustrate its uses, were all supplied by the best artists, and now exist in more profusion than in any other church; yet, with all this, St. Peter's is a failure, and has not even a single defender among the architectural critics of Europe.

Externally, the triapsal arrangement of three great tribunes at the



29.

East Front of St. Peter's. From a Photograph.

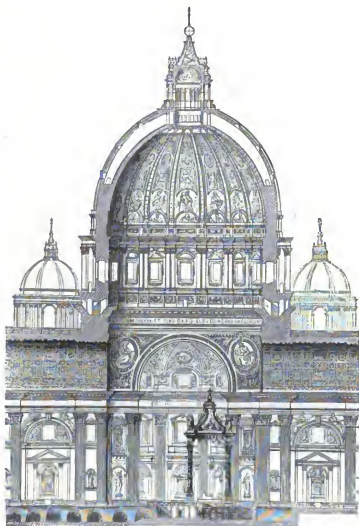
west end, accentuated by square masses between in the angles, and surmounted by such a dome as that of St. Peter's, ought to be the most beautiful that can well be conceived ; but its effect is dreadfully marred by the only ornament being a gigantic Order of Corinthian pilasters, 108 ft. in height from the base to the top of the cornice, and surmounted by an attie of 39 ft., and with a podium or basement of 15 ft., making up a wall 162 ft. in height (Woodcut No. 28). These Corinthian pilasters, spaced irregularly, are repeated all round the church, without even being varied by becoming three-quarter columns, except in the eastern façade, which cannot be seen in conjunction with the rest of the church. They are consequently unmeaning to the last degree. A Doric or Ionic pilaster is never so offensive : the capital is so unimportant in these that the pilaster becomes a mere panelling or buttress to the wall ; but the great acanthus-leaves of the Corinthian order, nearly 7 ft. in height, challenge attention everywhere ; and when it is found that they have really no work to do, and are mere useless ornament, our

sense of propriety is offended. Between these pilasters there are always at least two stories of windows, the dressings of which are generally in the most obtrusive and worst taste, and there is still a third storey in the attio, all which added together make us feel much more inclined to think that the architect has been designing a palace of several stories on a gigantic scale, and trying to give it dignity by making it look like a temple, rather than that what we see before us is really a great basilican hall degraded by the adoption of palatial architecture. We know in fact that there is falsehood somewhere, and are at a loss to know in which direction it lies, or by what standard of taste to judge the culprit.

In itself the dome is a very beautiful structure, both internally and externally; taking it altogether, perhaps the very best that has yet been constructed. Externally, its effect is in a great measure lost, from its being placed in the centre of a great flat roof, so that its lower part can nowhere be properly seen except at a distance; and it nowhere groups symmetrically with the rest of the architecture (Woodcut No. 29). The lengthening of the nave has added to this defect, but hardly to any considerable extent, as the ground falls too rapidly towards the Tiber to have allowed its base ever to be seen in front; and cutting the Gordian knot by hiding it altogether was perhaps the best thing that could have been done.

It is the same defect of the introduction of an order in every respect disproportioned to the size of the interior that destroys the proportions of the whole. An order 100 ft. in height is by no means excessive under a dome 333 ft. high internally; and consequently the temptation to use it in the particular position was so obvious, that, if the interior was to be Classical, it was almost impossible to resist it; besides, it was there in perfect proportion. When, however, the same order came to be carried round all the tribunes, and down the nave, where the whole height was only 143 ft., the disproportion became offensive, and not only dwarfed everything near it, but necessitated the exaggeration of every detail and every ornament, to such an extent as to give an air of coarseness and vulgarity to the whole, to an extent hardly to be found in any other Renaissance building.

It is probable that the introduction of this gigantic order in the interior is due to Bramante, as it was adopted by San Gallo, who, from his treatment of the exterior, could not have approved of it. Had the former carried it out, it is evident from his plan that he would have corrected its defects very considerably. Instead of the four great arches, each 40 ft. wide, with his monster pilasters between each, with which Maderno disfigured the nave, Bramante proposed five arches with slighter piers, and might have introduced six with good effect. A Gothic architect would have employed nine or ten in the same space, and a Classic architect eighteen or twenty pillars. The latter would probably have been nearest the true proportion if the roof was to have been of wood; with a vault and pointed arches, the Gothic proportion would have been the best; but with round arches and a vault, six or seven openings at the utmost could only have been employed; but in



30.

Section of St. Peter's. Reduced from Bonanni by Rosengarten.

either case the pillars or pilasters ought only to have supported the arches, as under the dome, and never to have run up between them to the springing of the vaults.

The vaults themselves are of great beauty, and free from most of the defects of the architecture that supports them, and so is the interior of the dome, except that it is so lofty that it dwarfs the rest, and it is painful to look up at it. Had it sprung from a little above the main

cornice of the pendentives, it would have looked much larger in itself, and have increased the apparent vastness of the church to a very considerable extent.

Another defect arising from the gigantic size of the internal Order is, that it required a corresponding exaggeration in every detail of the church. The Baldacchino, for instance, over the altar, rises to 100 ft. in height, and has an Order 62 ft. high; but with even these dimensions it is hardly tall enough for its situation. But it is even worse with the sculptured details. The figures that fill the spandrels of the pier arches throughout the church would, if standing upright, be 20 ft. in height. The first impression they produce on looking at them is, that they are little more than life-size; and the scale they consequently give to the building is that it is less than half the size it really is. When the mind has grasped their real dimensions, this feeling is succeeded by one almost of terror, lest they should fall out of their places, the support seems so inadequate to such masses; and, what is worse, by that painful sense of vulgarity which is the inevitable result of all such exaggerations. The excessive dimension given to the Order internally is, in fact, the key-note to all the defects which have been noticed in the interior of this church, and is far more essentially their cause than any other defect of design or detail.

No church in Europe possesses so noble an atrium as is formed by the great semicircular colonnades which Bernini added in front of St. Peter's. These are 650 ft. across; but their effect is very much marred by their being joined to the church by two galleries, 306 ft. long, sloping outwards as they approach the church. These last are in consequence scarcely seen in the first approach, so that the colonnades appear to be in contact with the church itself, and its size is diminished by the apparent juxtaposition, without the device adding to the dimensions of the Order of the atrium. Had they been made to slope inwards, there would have been a false perspective that would have added considerably to the optical dimensions of both; but either would have been wrong, as all theatrical tricks are in true architecture. The only true plan was to make them parallel to one another, and at right angles to the church, when each part would have taken its proper place, and each appeared in its true relative dimensions.

From whatever point of view we regard it, the study of St. Peter's is one of the saddest, but at the same time one of the most instructive examples in the whole history of Architecture. It is sad to think the world's greatest opportunity should have been so thrown away because this building happened to be undertaken at a time when Architecture was in a state of transition, and when painters and amateurs were allowed to try experiments in an art of which they had not acquired the simplest rudiments and did not comprehend the most elementary principles. Had such an opportunity fallen to the lot of the ancient Egyptians, its dimensions would have secured it a greater sublimity than is found even at Carnac. If Greece could have been allowed to build on such a scale, the world would have been satisfied for ever afterwards; and even in India, so large a building must have been

exquisitely beautiful. Had it been intrusted to any dozen master masons in the Middle Ages—to men it may be who could neither read nor write—they would have produced a building with which it would have been difficult to find fault; but here, all the talent, all the wealth of the world have been lavished, only to produce a building whose defects are apparent to every eye, and which only challenges our admiration from its size and the richness of its ornamentation. The result has been a building which pretends to be Classical, but which is essentially Gothic. It parades everywhere its Classical details, but the mode in which they are applied is so essentially Mediæval, that nobody is deceived. We have two antagonistic principles warring for the mastery—the one Christian and real, the other sentimental and false; and, in spite of all the talent bestowed upon it, it must be admitted that the failure is complete. It is a failure, in the first place, because its details are all designed on so gigantic a scale as to dwarf the building, and prevent its real dimensions ever being appreciated. It fails even more because these details are not, except under the dome, even apparently constructive. In almost every part, they are seen to be merely applied for the sake of ornament, and more often to conceal than to accentuate the true construction. The pilasters, both externally and internally, though the leading features, seldom accord—never on the exterior—with the tiers of windows or niches between them; and the unmeaning attic that crowns the Order is in itself sufficient, in a church, to throw the whole out of keeping. Nowhere, in fact, except in the dome and the vaults, is there truth of either construction or ornamentation; and these elements, in consequence, interfere with one another, to an extent which is probably more striking here than it is elsewhere, from the scale on which it is carried out, but is in reality as fatal to other buildings, which will be alluded to hereafter.

Notwithstanding all this, there is a simplicity and grandeur about the great vault of the nave, which goes far to redeem the bad taste of the arches which support it; and the four great vaults of the nave, transepts, and choir, each 80 ft. in span and 150 ft. in height, opening into a dome of the dimensions and beauty of proportion of that of St. Peter's, form together one of the most sublime architectural conceptions that the world has yet seen, and one worthy of the principal temple of the Christian religion.

III.—CHURCHES SUBSEQUENT TO ST. PETER'S.

The church of San Giovanni Laterano ranks next in importance to St. Peter's among the churches of Rome; and next in size, if we omit the old basilica of St. Paul's, burnt down in 1830. Having been erected as lately as the tenth century, as a five-aisled basilica, it does not seem to have been in so decayed a state as to necessitate its being entirely rebuilt, as was the case with St. Peter's; but it has been so encrusted with modern additions, that it requires the keen eye of an antiquary to detect the ancient framework that underlies the modern accretions.

The first important addition that was made was that of a portico to

the northern transept, by Dominico Fontana,¹ in 1586 (Woodcut No. 31). It consists of five arcades of the Doric order below, surmounted by a similar series of the Corinthian order above. There is nothing either striking or original in the design, being a mere modification of the arrangements of the old amphitheatre; but it is elegant and in good taste; and, if we are prepared to forego all evidence of thought, or anything to mark the feelings of the age, there is no fault to find with



31

View of the lateral Porch of San Giovanni in Laterano. From Letarouilly.

it. Its proportions are good, its details elegant, and its design appropriate to the purposes to which it is applied. In an age which was enamoured with Classical forms, it must have appeared a type of High Art. Even if its architect was not as enthusiastic a Revivalist as his employers, he must at all events have been content with the amount of fame he attained with so little expenditure of thought. Though this porch may not exhibit the highest quality of design, its architect deserves great credit, considering the age in which he lived, for intro-

¹ Born 1543; died 1607.

ducing no more instances of bad taste than it displays, and adhering so strictly to the Classical forms he was trying to emulate.

The principal front of the church retained its primitive simplicity for more than a century and a half after that time, when the present façade was added to it by Alessandro Galilei¹ in 1734 (Woodcut No. 32); and, considering the age when it was built, it too must be



32. Principal Façade of the Church of San Giovanni in Laterano. From Letarouilly.

considered a model of good taste and propriety, more especially if we look inside the church and see with what frightfully bad taste it had been disfigured by Borromini in 1660. That probably was the worst period of Roman Art, and it was with something like a return to a more correct appreciation of the Classic styles that Galilei's façade was designed. It was no doubt a mistake to place the principal Order on such high pedestals; and the usual excuse for this arrangement was wanting here; for the secondary Order is so small as to be

¹ Born 1691; died 1737.

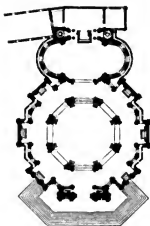
merely an ornament to the windows and openings, and does not compete in any way with the main features. The balustrade on the top is too high, and the figures it supports too large; but it is, on the whole, a picturesque and imposing piece of architectural decoration, with more ingenuity and more feeling than almost any other Italian design of its age; and, considering that it was essential that there should be an upper gallery, from which the Pope might deliver his blessing, some of its defects could with difficulty have been avoided.

The same architect designed the Corsini Chapel attached to this church; and, though a little overdone in ornament, the design is well understood and appropriate, and is in singularly good taste and elegant, when viewed in conjunction with the capricious interior of the church to which it is attached.

IV.—DOMICAL CHURCHES.

The admiration excited by the great domical creations of Brunelleschi and Michael Angelo fixed that form as the fashionable one in Italy; and no great church was afterwards erected in which the dome does not form a prominent feature in the design. In some instances the dome or domes were the church.

One of the best known examples of this is the Santa Maria delle Salute, on the Grand Canal at Venice, built by Baldassare Longhena¹ in 1632, according to a decree of the Senate, as a votive offering to the Virgin for having stayed the plague which devastated the city in 1630. Considering the age in which it was erected, it is singularly pure, and it is well adapted to its site, showing its principal façade to the Grand Canal, while its two domes and two bell-towers group most pleasingly in every point of view from which Venice can be entered on that side. Externally it is open to the criticism of being rather overloaded with decoration; but there is very little of even this that is unmeaning, or put there merely for the sake of ornament. Though it certainly is open to criticism in this respect, taking it altogether there are few buildings of its class in Italy whose exterior is so satisfactory as this one is. Internally the great dome is only 65 ft. in diameter, but it is surrounded by an aisle, or rather by eight side chapels opening into it through the eight great pier arches; making the whole floor of this, which is practically the nave of the church, 107 ft. in dia-



33. Plan of the Church delle Salute at Venice.
Scale 160 ft. to 1 in. From Cicognara.

¹ Born 1602; died 1682.



34.

View of the Rialto and Church delle Salute, Venice. From Canaletti.

meter. One of these side chapels is magnified into a dome, 42 ft. in diameter, with two semidomes, forming the choir, and beyond this is a small square chapel; an arrangement which is altogether faulty and very unpleasing. As you enter the main door, the great arches of the dome being all equal to one another, no one of them indicates the position of the choir; and in moving about, it requires some time to discover where the entrance and where the sanctuary are placed. Besides this, going from a larger dome to a smaller—from greater splendour to less—ought always to be avoided. In fact, if the church were turned round, and the altar placed where the entrance is, it would be a far more satisfactory building. As it is, neither the beauty of the material of which it is built, nor the elegance of its details, can redeem the radical defects of its internal design, which destroy what otherwise might be considered a very beautiful church.

The church of San Simone Minore, also in the Grand Canal, is a building very similar in plan, but open to exactly the opposite criticism of being too simple. The church itself, as seen from the canal, is a



35.

Elevation of principal Façade of the Church of Carignano at Genoa.

plain circular mass, surmounted by an enormous dome 56 ft. in diameter internally, which utterly crushes what is one of the most beautiful Corinthian porticoes of this or any other modern building. It is harmonious in proportion, and singularly bold in its features, from the strength of the square pillars that support its angles; while generally a beauty of detail and arrangement characterises every part of its design.

As an example how bad it is possible for a design of this sort to be without having any faults which it is easy to lay hold of, we may take the much-praised church of the Carignano at Genoa. It was built by Galeazzo Alessi,¹ one of the most celebrated architects of Italy, the friend of Michael Angelo and Sangallo, and the architect to whom Genoa owes its architectural splendour, as much as Vicenza owes hers to Palladio, or the City of London to Wren.

The church is not large, being only 165 ft. square, and the dome 46 ft. in internal diameter. It has four towers at the four angles, and, when seen at a distance, these five principal features of the roof group pleasingly together. But the great window in the tympanum, and the two smaller windows on each side, are most displeasing; neither

¹ Born 1500; died 1572.

of them has any real connexion with the design, and yet they are the principal features of the whole; and the prominence given to pilasters and panels instead is most unmeaning. If we add to this that the details are all of the coarsest and vulgarest kind, the materials plaster and bad stone, and the colours introduced crude and inharmonious, it will be understood how low architectural taste had sunk when and where it was built. The strange thing is, that critics at the present day should be content to repeat praise which, though excusable at the time it was erected, is intolerable when the principles of the art are better understood, for it would be difficult in all Italy, or indeed in any other country, to find a church so utterly devoid of beauty, either in design or in detail, as this one is. Its situation, it is true, is very grand, and it groups in consequence well with the city it crowns; but all this only makes more apparent the fault of the architect, who misapplied so grand an opportunity in so discreditable a manner.

One of the least objectionable domical churches of Italy is the Superga, near Turin, built by Ivrea, in fulfilment of a vow made by Victor Amadeus at the siege of Turin, in 1706. Its dome is little more than 60 ft. in diameter, resting on an octagon, with a boldly projecting portico of four Corinthian columns in front over the entrance, and is joined to a cloister behind. This is very cleverly arranged, so as to give size and importance to what otherwise would be a small church; but in doing this the church and the convent are so mixed up together that it is difficult to tell where one begins and the other ends; and, as is too frequently the case with these buildings, the falsehood is so apparent that both parts suffer.

One of the last, though it must also be confessed one of the very worst, examples of a domical church in Italy, is that of San Carlo at Milan, the foundation of which was laid as lately as 1838. The architect of the building was the same Amati who so strangely disfigured the façade of the cathedral in the same city in Napoleon's time. The building deserves the careful study of every architect, inasmuch as, copying the best models, using the correctest details and the most costly materials, the designer has managed to produce one of the most unsatisfactory buildings in Europe. Internally it is meant to be a copy of the Pantheon at Rome, this being 105 ft. in diameter and 120 in height; but, instead of the sublimity of the one great eye of the dome, there is in the Milanese example only an insignificant lantern, and light is introduced through the walls by mean-looking windows, scattered here and there round the building, and in two stories. Notwithstanding that it possesses internally twenty-two monolithic columns of beautiful Baveno marble, and some good sculpture, the whole is thin, mean, and cold, to an extent seldom found anywhere else.

Externally the design is as bad. A portico of thirty-six Corinthian columns is arranged pretty much as in the British Museum. Each of these is a monolith of marble 9 ft. in circumference, and the capitals and entablature are faultless; but the central portico is crushed into insignificance by the dome of the church, which rises, like a great dish-cover, behind it; and the wings are destroyed by having houses built behind them, with three stories of windows under the porticoes,



36.

Church of St. Carlo at Milan. From a Photograph.

and three more above them, so arranged as to compete with, and as far as possible destroy, any little dignity the dome itself might possess.

However painful the coarseness and vulgarity of Alessi and Ivrea may have been, their works are after all preferable to the tame and unmeaning Classicality of such a design as this, and which, unfortunately, is found also in Canova's church at Possagno, and is but too characteristic, not only of the architecture, but of all the Arts in Italy at the present day.

So enamoured were the Italians with their success in the employment of the dome, that all their great churches of the Renaissance partake more or less of this quasi-Byzantine type. Not only did it afford space and give dignity to the interior, but it gave to these buildings externally an elevation which their architects were otherwise unable to supply. We, who are familiar with the northern Gothic of the Middle Ages, know how gracefully the spire was fitted to the church in every position; either as growing out of the intersection of the nave and transepts, or as twin guardians of the portal of the cathedral or minster, or as the single heavenward-pointing feature of the western front of the parish church. But the Italians knew nothing of this. In nine cases out of ten their campaniles were detached from the edifices to which they belonged, or, if joined to them, it was never as an integral or essential part of the design; and so far from giving height and dignity to the whole, it only tended to dwarf the church, and did this at the expense of its own elevation. The dome, on the other hand, did for the Italian church what the spire did for the Gothic. It not only marked the sacred character of the edifice externally, but it raised it well above the houses, and added that elevation which, in towns at least, is so indispensable to architectural dignity.



37.

Church of San Zaccaria, Venice. From a Photograph.

V.—BASILICAN CHURCHES—EXTERIORS.

As most of the Italian churches were situated in the streets of towns, where only the entrance façades are exposed, it was to them that the attention of the architects was principally directed, and, not knowing the art of using the steeple to give dignity to these, they tried by richness of ornament to cover the defects of the design.

On this side of the Alps the parish church almost always stands free in its churchyard, the cathedral in its close, and every side of these buildings is consequently seen; so that it becomes necessary to make every part ornamental, and in most cases the east end and the flanks are as carefully designed, and sometimes even more beautiful than the façade itself. In Italy it is hardly possible to quote a single instance in which,

during the Renaissance period, either the apse or the flanks of an ordinary basilican church are treated ornamentally. All the art is lavished on the façade, and, in consequence of its not being returned along the sides, the whole design has, far too generally, an air of untruthfulness, and a want of completeness, which is often very offensive.

One of the finest of the early façades of Italy is that of San Zaccaria at Venice. The church was commenced in 1446, and internally shows pointed arches and other peculiarities of that date. The façade seems to have been completed about 1515, and though not so splendid as that of the Certosa at Pavia (Woodcut No. 22), and some of the more elaborate designs of the previous century, it is not only purer in detail, but reproduces more correctly the internal arrangements of the church. Though its dimensions are not greater than those of an ordinary Palladian front, the number and smallness of the parts make it appear infinitely larger, and, all the Classical details being merely subordinate ornaments, there is no falsehood or incongruity anywhere; while, the practical constructive lines being preserved, the whole has a unity and dignity we miss so generally in subsequent buildings. Its greatest defect is perhaps the circular form given to the pediment of the central and side aisles, which does not in this instance express the form of the roof.

The curvilinear roof is, however, by no means unusual in Venice, and in the nearly contemporary church of Sta. Maria dei Miracoli (1480-89) the circular roof still exists, and the façade is surmounted by a semicircular gable like this, but there following the exact lines of the roof, and in the School of St. Mark's and many other buildings this form is also found; so that, though it may appear somewhat unusual and strange to us, it was familiar to the Venetians of that day. They, in fact, borrowed it with so many other features of their Art from the Byzantines, with whom it had always been in use, and represented correctly the exterior of their vaults. But a further excuse for its introduction here is, that, as



38. Church of the Redentore. Reduced from Cicognara by Rosengarten.

the design of these façades in Italy is never returned along the sides, the roofs form no part of the composition, and their form was consequently generally neglected.

One of the first difficulties which the architects encountered in using the Orders was to express the existence of side aisles as a part of the design. The most obvious way was to make the façade in two stories, as was very generally done on this side of the Alps, and by the Jesuits everywhere, and as had been already suggested by Alberti at Rimini (Woodcut No. 14) in the fifteenth century. It was, however, felt by the architects of the following epoch that this was sacrificing the great central aisle to the subordinate parts of the church, and suggesting two stories, when in fact there was only one. The difficulty was boldly met by Palladio, in the façade he added to the Church of San Francesco della Vigna at Venice, which is one of his most admired compositions; but the great Order so completely overpowers the smaller, that the result is almost as unpleasing as in St. Peter's at Rome. Nearly the same thing is observable in the church of the Redentore, but in this instance, there being practically no side aisles to the church, the little lean-tos on each side do not obtrude themselves to the same extent, and may be practically disregarded; so that the design as seen directly in front is confined to the four pillars of the portico, and the Order belonging to the entrance. When, however, the flanks of this church are seen in conjunction with the façade, the defects of the design are painfully manifest, and the incongruity of the two Orders becomes everywhere apparent. In order to

avoid these defects, Palladio hit upon the expedient so much admired in his celebrated church of San Giorgio Maggiore in the same city. By placing the larger Order on pedestals, and, bringing the subordinate Order down to the floor-line, he rendered the disproportion between them so much less glaring that the effect is certainly as pleasing as it can well be expected to be. The real fact is, however, everywhere apparent, that the Orders are intractable for purposes they were never designed to subserve; and when an architect is bound to use only pillars of ten diameters, and to use these for all the purposes of internal and external decoration, he has forged fetters for himself that no ingenuity can free him from.

Unfortunately for the arts of Italy at this age, the influence of

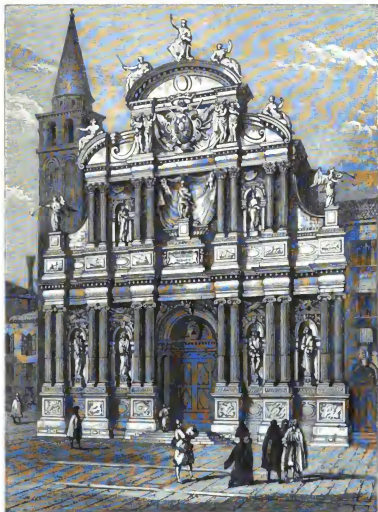


39. Church of San Giorgio Maggiore, Venice. From *Scognam.*

Michael Angelo was supreme, and continued so during the whole of the sixteenth century. Even Raphael, his great rival, seems to have bowed to it, and, if he had lived twenty years longer, would probably have been obliged to paint the meek Saviour of the Christians as a Hercules, and the Virgin as an Amazon, in order to keep pace with the taste of the day. Though Palladio's was a far gentler and more elegant mind than Michael Angelo's, he too could not escape the contagion, even if he had been inclined. What the latter had done at St. Peter's and elsewhere, was the standard of the day. Too impetuous to be controlled by construction, and too impatient to work out details, he had sought by bigness to excite astonishment, and mistook exaggeration for sublimity. His colossal Order of pilasters at St. Peter's, though astonishing from its size, is humiliating from its vulgarity; but it pleased his age, as his paintings and his sculpture had done. Every artist was obliged to paint up to his scale, and every architect felt himself bound to use as large an Order as his building would admit of, and seems to have acquiesced in the mistaken doctrine that largeness of details was productive of grandeur in the mass. Palladio was therefore probably not so much to blame if his age demanded, as it seems to have done, his employment of these large features on his façades. If he employed them, it was indispensable that he should also introduce a smaller Order to represent the aisles and minor parts of the design; and if he did not succeed in harmonising these two perfectly, he has at least been as successful in this as any one else, and in all his details there is an elegance which charms, and a feeling of constructive propriety which makes itself felt, even in the most incongruous of his designs.

Subsequently to the Palladian period, architects were therefore hardly to blame when they agreed to return to the earlier practice, and to use the Orders merely as ornaments. As the climate of Italy enabled them to dispense with windows in their façades whenever they thought it expedient to do so, they met what they conceived to be all the exigencies of the case when they designed such a façade as that of the church of S. Maria Zobenico at Venice, built by G. Sardi in 1680, where the Orders, though more important than at San Zaccaria (Woodcut No. 37), are still mere ornaments, but so much more important than in that church as to become practically independent of the construction, and to produce a far less pleasing effect. It must also be confessed that the ornamentation is here overdone, and not always in the best taste; but, taken for what it is—merely an ornamental screen in front of a church—it is a very beautiful and charming composition.

Without attempting to enumerate the variety of façades of more or less beauty which are found facing the streets in all the great cities of Italy, those just described may be taken as types of them:—San Zaccaria represents the façades of the fifteenth century, when Classical elegance was introduced without being hampered with Classical forms; San Giorgio is one of the best examples of the Classical school of the sixteenth century, when a more literal system of copying was introduced by Palladio and his contemporaries; and the church of Zobenico is a fine example of the reaction against the restraints of the purer style, which characterised the seventeenth century. The misfortune is,



40.

Church of Sta. Maria Zobenico, Venice. From Canaletti.

that this last form lent itself only too easily to the caprices of the Borrominis, Guarinis, and men of that class, and the Jesuits in particular abused its freedom to an extent that is often very offensive; but, notwithstanding all this, the richness of the façades of this style is always attractive, and in spite of bad taste we are frequently forced to admire what our more sober judgment would lead us to condemn.

VI.—BASILICAN CHURCHES—INTERIORS.

In their interiors the Italian architects were hardly so fortunate as in their exteriors. The Classical Orders were originally designed by

the Greeks for the external decoration of temples; and although the Romans afterwards employed them internally, it was generally with considerable modifications. In the great halls of their baths, which were what the Italian architects generally strove to copy, they introduced the fragment of an entablature over a column, but only as a bracket when the pillar was placed against the wall—never when it was standing free, where alone its use is objectionable. Their architects were fast getting rid of all trace of the entablature when the style perished; and it cannot but be considered as most unfortunate that the Cinque-cento architects should have reintroduced it for internal purposes.

As a general rule, the interiors of the Renaissance churches are cold and unmeaning; or, if these defects are obviated, it is, as at St. Peter's, at the expense not only of the simplicity but of the propriety of the architectural design.

The earlier examples all fail from the infrequency and tenuity of the points of support. At San Zaccaria, for instance, the nave is divided from the side aisles by three tall arches, supported on two tall octagonal pillars, so thin, and apparently so weak, as to give a starved look to the whole. The same defect is observed in the Gothic cathedral of Florence, and generally in all Italian Mediæval churches. Their architects thought they had done enough when they had met the engineering difficulties of the case, and had provided a support mechanically sufficient to carry the vault of the roof. They never perceived the artistic value of numerous points of support, nor the importance of superabundant strength in producing a satisfactory architectural effect. Notwith-

standing this defect, the Cinque-cento construction was always truthful, and, so far, more pleasing than that of the subsequent age, when the most prominent parts of the design were generally added for effect only.

One of the most successful interiors of the age is generally admitted to be that of San Giorgio Maggiore at Venice, by Palladio. In this he has adopted the same device as in the exterior (Woodcut No. 41), by placing the larger Order on pedestals, and thus preventing such a discrepancy of size as would be fatal to either; but with all this the decoration is unmean-



41. Interior of San Giorgio Maggiore, Venice. From Selvatico.

ing, and the principal Order is felt to be useless. The mode also in which the clerestory windows cut into the vault is most displeasing,

and none of the parts seem as if they were designed for the purposes to which they are applied.

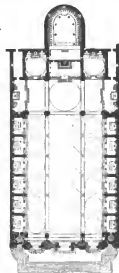
His other celebrated church is that of the Redentore, close by, on the Canal of the Giudecca. The nave is a great hall (Woodcut No. 42), 50 ft. wide by 105 in length, with narrow side chapels, between which ranges a Corinthian Order, of great beauty in itself, and standing on the floor without pedestals. It is merely an ornament, however, and has no architectural connexion with the plain flat elliptical vault of the church, which is most disagreeably cut into by the windows that give light to the nave. A worse defect of the design is that, instead of the church expanding at the intersection, the supports of the dome actually contract it; and though the dome is of the same width as the nave, and has a semicircular tribune on each side, the arrangement is such that it looks smaller and more contracted than the nave that leads to it. If we add to these defects of design that, both here and at San Giorgio, no marble or colour is used—nothing but plain cold stone and whitewash—it will be understood how very unsatisfactory these interiors are, and how disappointing, after all the praise that has been lavished on them.

These defects are more apparent perhaps in Venice than they would be elsewhere, many of the churches of that city, as of Genoa, being internally rich beyond conception, with marbles of extreme rarity and beauty. In such churches as that of the Jesuits or the Barefooted Friars at Venice, or San Ambrogio at Genoa, the criticism of the architect must give way to the feelings of the painter, and we must be content to be charmed by the richness of the colouring, and astonished at the wonderful elaboration of the details, without inquiring too closely whether or not it is all in the best taste.

The only church that fairly escapes this reproach is that of the Sta. Annunziata at Genoa, built at the sole expense of the Lomellini family, it is said, towards the end of the seventeenth century;¹ though how a church so pure in design came to be executed then is by no means clear. This church is a basilica of con-

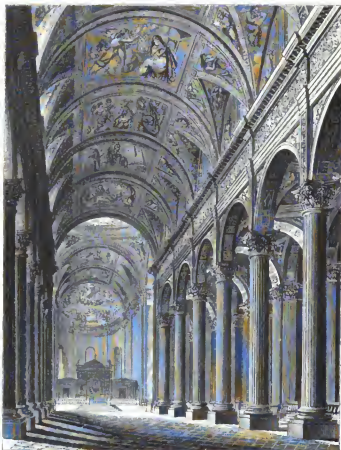


42. Plan of Church of Redentore, Venice. From *Cleopatra*. Scale 100 ft. to 1 inch.



43. Plan of Sta. Annunziata at Genoa. Scale 100 feet to 1 inch.

¹ Milizia ascribes the design to Puget. Born 1622; died 1694.



44. View of the Interior of the Church of Sta. Annunziata, Genoa. From Gauthier.

siderable dimensions, being 82 ft. wide, exclusive of the side chapels, and 250 ft. long. The nave is separated from the aisles by a range of Corinthian columns of white marble, the fluting being inlaid with marbles of a warmer colour. The walls throughout, from the entrance to the apse, are covered with precious marbles, arranged in patterns of great beauty. The roof of the nave is divided longitudinally into three compartments, which prevents the awkwardness that is usually observed where windows of a semicircular form cut into a semicircular vault. Here it is done as artistically as it could be done in the best Gothic vaults. The one defect that strikes the eye is that the hollow lines of the Corinthian capitals are too weak to support the pier-arches, though this criticism is equally applicable to all the original Roman basilicas of the Constantinian age; but, never-

theless, the whole is in such good taste, so rich and so elegant, that it is probably the very best church of its class in Italy.¹

At Padua there are two very large and very fine churches—the cathedral and the now desecrated church of Sta. Giustina—both of the great age of the sixteenth century, and completed—in so far at least as their interiors are concerned—upon one uniform original design. In dimensions also they exceed almost any other churches of their age, excepting, of course, St. Peter's; and their proportions are generally good. But with all this it would be difficult to point out any similar buildings producing so little really good artistic effect. This arises from the extreme plainness, it may almost be said rudeness, of their details, which are all, too large and too coarse for internal purposes, and repeated over and over again without any variation throughout their interiors. As works of engineering science they might be called good and appropriate examples, but as works of architecture they fail, principally because, though it cannot be denied that their design is ornamental, it is not ornamented. Their outline is grand and well proportioned, though monotonous; but they want that grace, that elegance of detail, which would bring them within the province of Architecture as a Fine Art, and without which a building remains in the domain of the engineer or builder.

So complete is the ascendancy of the Gothic style at the present day that it is extremely difficult to form an impartial judgment with regard to these Renaissance buildings of the Italians. We have got so completely into the habit of measuring everything by a Mediæval standard, that an ecclesiastical edifice is judged to be perfect or imperfect in the exact ratio in which it approaches to or recedes from the Gothic type; and its intrinsic merits are consequently too often overlooked. Taken as a whole, however, it is probably not unjust to assert that, after four centuries of labour, the Italians have failed to produce a satisfactory style of Ecclesiastical Architecture. The type which Alberti may be said to have invented in San Andrea at Mantua has been reproduced some hundreds of times on all scales, from that of St. Peter's at Rome to that of the smallest village church, and with infinite variations of detail or arrangement. These, however, have always been the products of individual taste or talent, or of individual caprice or ignorance, and the result has consequently been that no progress has been made; so that at the present hour the Italians are just where they were in this respect three centuries ago. Although they have occasionally in the mean while produced some edifices to which it is impossible to refuse our admiration, it must be confessed that, considering their opportunities, the result is on the whole negative and unsatisfactory.

¹ Within the last few years the whole of this interior has been re-gilt and re-painted, probably more gaily than was originally intended; and it consequently is just now de-

ficient in that solemnity we naturally look for in a religious edifice; but these are defects which time will cure, and meanwhile are by no means inherent in the design.

CHAPTER II.

SECULAR ARCHITECTURE.

I. FLORENCE.—II. VENICE.—III. ROME.—IV. VICENZA.—V. GENOA.—VI. MANTUA.
—VII. MILAN.—VIII. TURIN, NAPLES, &c.—IX. CONCLUSION.

THE adaptation of Classical forms to Civil Architecture commenced in Italy under much more favourable and more legitimate circumstances than those which had marked its application to Ecclesiastical Art. Except in Venice, no palaces or public buildings existed during the Middle Ages at all adapted to the wants of the new state of society which was everywhere developing itself during the Cinque-cento period. The architects were not tearing themselves away from a well-understood and hallowed type, as was the case with churches, in order to introduce a new and, to a great extent, an inappropriate style of decoration. They had in Civic Architecture nothing to destroy, but everything to create. They, fortunately, were also without any direct models for imitation, for, though remains of temples existed everywhere, few palaces, and scarcely any domestic buildings, of the Classical period remained which could be copied. They had only to borrow and adapt to their purpose the beautiful details of Classical Art, and to emulate so far as they could that grandeur and breadth of design which characterised the works of the Romans, and all would have gone well. It soon, however, became apparent that those architects who were exercising their misdirected ingenuity to make churches look like heathen temples, could not long resist the temptation of making their civil buildings look like what they fancied (most mistakenly) the civil buildings of the Romans must have been. This did not, however, take place in the fifteenth century. During that early period it is delightful to observe how spontaneous the growth of the new style was; how little individuality there is in the designs, and how completely each city and each province expressed its own feelings and its own wants in the buildings it then erected.

Nothing can be more magnificent than the bold, massive, rusticated palaces which were erected at Florence and Sienna during this period—so characteristic of the manly energy of these daring and ambitious, but somewhat troublesome republics during the Medicean era.

Equally characteristic are the richly-adorned façades of the Venetian nobles—bespeaking wealth combined with luxury, and the

security of a well-governed and peaceful city, strongly tinctured with an Oriental love of magnificence and display.

The palaces of Rome, on the other hand, though princely, are ostentatious, and, though frequently designed in the grandest style, fell easily under the influence of the Classical remains among which they were erected, and soon lost the distinctive originality which adhered for a longer period to Florence and Venice, and attained in consequence in those cities a more complete development than in the capital itself. Even, however, in their best age the Roman palaces had neither the manly vigour of the Florentine examples, nor the graceful luxuriousness of those of Venice.

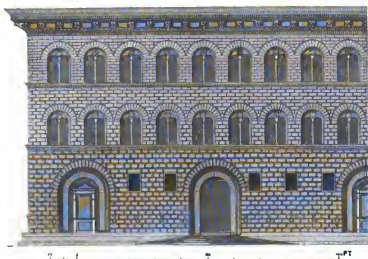
Early in the sixteenth century these differences disappeared; and, under the influence of Sansovino, Vignola, and Palladio, all Italy was reduced to one standard of architectural design. When the style was new, it was, and must have been, most fascinating. There was a largeness about its parts, an elegance in its details, and it called up associations so dear to the Italians of that age, that it is easy to understand the enthusiasm with which men hailed it as a symbol of the revival of the glories of the Roman Empire. The enthusiasm soon died out, for Italy in the seventeenth century was no longer what it had been in the sixteenth century. Though, from Italian influence, the style spread abroad over all Europe, it soon acquired at home that commonplace character which distinguishes the Renaissance buildings of Verona, Vicenza, Genoa, and all the later buildings throughout Italy. The meaning of the style was lost, and that dead sameness of design was produced which we are now struggling against, but by convulsive efforts, far more disastrous in the mean while than the stately bondage from which we are trying to emancipate ourselves.

I.—FLORENCE.

The history of Secular Architecture in Florence opens with the erection of two of her most magnificent palaces—the Medicean, since called the Riccardi, commenced in 1430, and the Pitti, it is said in 1435. The former, designed by Michelozzo,¹ notwithstanding its early date, illustrates all the best characteristics of the style. It possesses a splendid façade, 300 ft. in length by 90 in height. The lower storey, which is considerably higher than the other two, is also bolder, and pierced with only a very few openings, and these spaced unsymmetrically, as if in proud contempt of those structural exigencies which must govern all frailer constructions. Its section (Woodcut No. 46) shows how bold the projections of the cornice are, and also illustrates, what it is necessary to bear in mind to understand the design of these Italian palaces, that the top storey is generally the principal of the two upper ones, which are usually those devoted to state purposes, and either the mezzanine or the rear of the block to domestic uses.

The most obvious objection to this design is the monotony of the

¹ Born about 1402; died about 1470.



45. Elevation of part of the Façade of Riccardi Palace, Florence. From Gauthier.

two upper stories of windows, and it would perhaps have been better if they had been grouped to some little extent. It must be observed, however, that the object of the design was to suggest two great suites of apartments arranged for festal purposes only, without any reference to either domestic or constructive exigencies—an impression which this façade most perfectly conveys.

The greatest ornament of the whole façade is the cornicione, whose



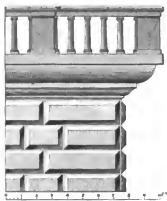
46. Section of Riccardi Palace, Florence. From Gauthier.

projection is proportioned to the mass below very much as the Classical Corinthian cornice is to the pillar that supports it, while at the same time it is so simplified as to suit the rustic mass which it so nobly crowns.

The Pitti is designed on even a larger scale, the façade being 490 ft. in extent, three stories high in the centre, each storey 40 ft. in height, and the immense windows of each being 24 ft. apart from centre to centre. With such dimensions as these, even a brick building would be grand; but when we add to this, the boldest rustication all over the façade, and cornices of simple but bold outline, there is no palace in Europe to compare with it for grandeur, though many may surpass it in elegance. The design is said to have been by Brunelleschi, but it is doubtful how far this is the case, or at all events how much may be due to Michelozzo, who certainly assisted in its erection, or to Amanati, who continued the building, left incomplete at Brunelleschi's death, in 1444. The courtyard displays the three Classical Orders arranged in stories one over another, but rusticated, as if in a vain endeavour to assimilate themselves to the façade; though the result is only to destroy their grace, without imparting to them any of the dignity it is sought by the process to attain to. It was more probably designed by Luca Fancelli, to whom Brunelleschi is said to have confided the execution of the whole; and designing a building, and erecting it, were not then such distinct departments of the art as they have since become.

The absence of the crowning projecting cornice is the defect which renders this palace, as an architectural object, inferior to the Riccardi. Instead of a feature so beautiful and well-proportioned as we find there, we have only such a string course as this (Woodcut No. 47), which, for such a building, is perhaps the most insignificant termination that ever was suggested. Was it intended to add a fourth storey?—or is this only the blundering of Amanati? It almost seems as if the first is the correct theory, for at so early a period it is difficult to conceive personal feelings or taste interfering with so grand a design.

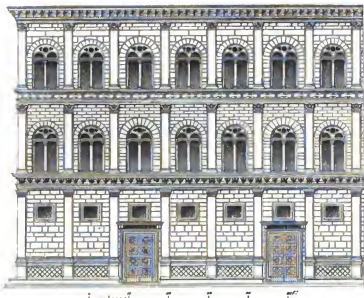
Perhaps the most satisfactory of these palaces, as a whole and complete design, is the Strozzi, designed by Cronaca,¹ and commenced in the year 1489. It stands perfectly free on all sides, and is a rectangle 190 ft. by 138; like all the rest, in three stories, measuring together upwards of 100 ft. in height. The cornice that crowns the whole is not so well designed as that of the Riccardi,



47. Cornice of Pitti Palace, Florence.

¹ Born 1454; died 1509.

but extremely well proportioned to the bold, simple building which it crowns, and the windows of the two upper stories are elegant in design, and appropriate to their situation. It may be that this palace is too massive and too gloomy for imitation; but, taking into account the age when it was built, and the necessity of security combined with purposes of state to which it was to be applied, it will be difficult to find a more faultless design in any city of modern Europe, or one which combines so harmoniously local and social characteristics with the elegance of Classical details, a conjunction which has been practically the aim of



48.

Part of the Façade of the Rucellai Palace, Florence. From Gauthier.

almost every building of modern times, but very seldom so successfully attained as in this example.

The Rucellai Palace was commenced in 1460, from designs by Leon Battista Alberti; and, although it has not the stern magnificence of those just mentioned, it must be confessed it gains in elegance from his Classical taste nearly as much as it loses in grandeur. It is probably the first instance in which pilasters form so essential a part of the design as they do here, and in it we first see an effect which afterwards became so detrimental, in the exaggeration of the string courses of the first and second stories, in order to make them entablatures in proportion to the Orders; and, what is worse, the paring down of the upper cornice to reduce it to nearly the same amount of projection. In this example these defects are treated so gently, and with such taste, that they do not strike at first sight, but they are the seeds of much that was afterwards so destructive to architectural design. It should

also be observed that a certain amount of play is given in this façade by making the spaces between the pilasters wider over the doorways than elsewhere, and by the variety given to the form of the rustication throughout. All these evidences of thought and care add very considerably to the general effect of the whole construction.

The Gondi Palace, designed by Giuliano da Sangallo,¹ and commenced in 1490, is less happy than those enumerated above, from the fact of the windows not being divided by mullions, and its cornicione being also inferior in design, and less salient in projection, though it still possesses many beauties that would render it remarkable except as a member of such a group.

The façade of the Piccolomini Palace at Sienna, though of dimensions nearly equal to the Strozzi, being 140 ft. wide by about 100 in height, and designed in what at first sight appears to be the same style, is painfully inferior; first, in consequence of the comparative smallness of the stones employed, and, secondly, because a mezzanino is introduced in the basement, and an attic smuggled into the frieze under the cornice; and the whole looks so meagre as to detract painfully from the majesty of the style. It was built very early in the sixteenth century, from designs by Francesco di Giorgio.

The same architect furnished the designs, in 1492, for the Spannocchi Palace in the same city; which, though much smaller than the last named, being 74 ft. wide and 80 ft. in height, is still far more beautiful as a work of Art, and its cornice, with a mask between each of the great consoles that support it, is one of the most elegant, if not the grandest, of the whole series. The palace has, however, the defect of the Sienna buildings, that the stones employed are too small to give effect to a design depending so much on rustication as the Tuscan palaces.

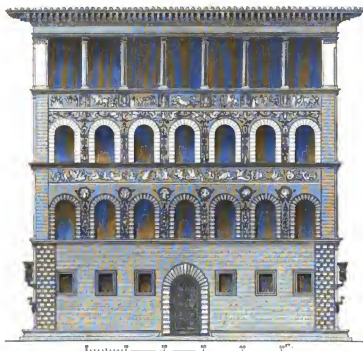
There are two other palaces in Florence, the designs of which are attributed to Bramante—the Gnadagni and the Nicolini. Their façades are nearly square—70 ft. each way—and almost identical, except that the first named is richly ornamented by decoration in Sgraffitti.² Both these palaces are full of elegance, and in the style peculiar to Floreneo, though probably in a more modern age than that to which they are ascribed, their most marked peculiarity being an open colonnade under the cornice, which, in a hot climate, is a very charming arrangement for domestic enjoyment, as well as an artistic one for architectural effect. They possess also a lightness and elegance of detail throughout, which, though neither so grand nor so monumental as the older rusticated palaces, is more suited to modern ideas of social security combined with elegance.

The series of really good and characteristic buildings closes at Florence with the Pandolfini Palace, commenced in 1520, it is said from designs by the celebrated Raphael d'Urbino, but was probably

¹ Born 1443; died 1517.

² Sgraffito is a name applied to a mode of decoration not unusual in Italy. The building intended to be so decorated is first covered with

a coating of black plaster, over this is laid a thin coat of white, and, by engraving on this, the design comes out in black. In that climate it seems a very permanent mode of ornamentation.



40.

Gualsigni Palace, Florence. From Gauthier.

by Francesco Arstotile and his brother Bastiano,¹ who certainly finished it. Though small—the principal façade, exclusive of the wing, being only 75 ft. wide by 50 high—it is still a dignified and elegant design. The usual rustication is abandoned, except at the angles and round the “porte cochère,” and the windows are no longer divided by mullions; but a smaller Order, with a pediment over each opening, frames every window. As used in this instance, these can hardly be called defects, and the panelling between the windows on the first floor gives a unity to the whole composition. In itself there is little to object to in the design of this palace, but it is transitional—the last of a good, the first of a bad class of buildings, in which the restraints were soon thrown off which guided the architect in making the design.

The Bartolini Palace, commenced in the same year from the designs of Baccio d'Agnolo,² shows the same elegance and the same defects of detail; but, from its being a three-storied building, 55 ft. in width and 70 in height, it has a more commonplace and less palatial look than the other.

The beauty and appropriateness of their own rusticated style seems to have prevented the Florentines from ever sinking in the third or

¹ Born 1481; died 1551.

² Born 1460; died 1543.

lowest stage of Italian Architecture. The second was reached in the Rucellai, where pilasters were introduced unmeaningly, where entablatures were used as string courses, and where, consequently, the actual cornice was only a third string course perhaps a little exaggerated. In other hands than Alberti's, this might have been fatal, but it escaped. Nowhere in Florence do we find pilasters running through two or three stories as in the designs of Michael Angelo and Palladio, and ornamentation consequently divorced from construction, which proved the third stage of downward progress. It must be confessed, however, that this mode of using pilasters is a peculiarity more frequently found on this side of the Alps than on the other, though it is wholly an invention of the Italian architects of the sixteenth century.

After the middle of the sixteenth century there are no domestic buildings in Florence which are remarkable either for originality or magnificence. But those enumerated above form a group as worthy of admiration as any to be found in any city of modern Europe, not only for its splendour, but for its appropriateness. It proves, if anything were wanted to prove it, how easily Classical details can be appropriated to modern uses when guided with judgment and taste, and how even the ancients themselves may be surpassed in this peculiar walk. It is very uncertain, from any information we have, whether any of the palaces of the ancients were at all equal in style to these, though the brick and stucco residences of the Roman emperors were larger than the whole of them put together.

It may be regretted that the boldness of the features of this style renders it appropriate only to buildings designed on the scale of these Florentine palaces, and consequently, when attempts are made in modern times to copy them in stucco, and with stories only 15 or 20 ft. high, the result is as painful as that of applying the architecture of the Parthenon to the front of a barber's shop. The Florentine style is only appropriate to the residence of princes as magnificent as the old Florentine nobles were, and cannot be toned down to citizen and utilitarian uses: though worthy of the warmest admiration as we find it employed in the province where it was first introduced.

II.—VENICE.

The history of the revival of Architecture in Venice is extremely different from that of Florence. She had no *fanatico* like Brunelleschi, no enthusiastic scholar like Alberti, to advocate the cause of antiquity, nor was she a new city in the fifteenth century. Already her Doge possessed a palace worthy of his greatness—the Foscari and Pisani were lodged in mansions suitable to their rank; there existed the Casa d'Oro, and numberless smaller palaces and houses, displaying as much architectural magnificence as the wealth or rank of their owners entitled them to. There was also the fact that Venice had no Classical remains within her Lagunes, and no great sympathy with Rome, which her citizens did not care to imitate, but rather felt that they had already surpassed her. The Venetians clung therefore to a style which

they had made almost their own, long after the other cities of Italy had abandoned it; and even as late as the sixteenth century we find pointed arches in the courtyard of the Doge's Palace and in the windows of the upper part of the external façade. Still it was impossible to resist the fashion that was everywhere prevailing, and we find about the years 1580-85, forty years after Brunelleschi's death, and after Alberti had been gathered to his fathers, that the Venetians too adopted Classical details in the buildings they thereafter commenced, but it was with a Gothic feeling, unknown at this time in any other part of Italy.

For about half a century from this time, or till about 1630, all the buildings of Venice were in a singularly elegant transitional style, about as essentially Venetian as the Gothic buildings of the city had been, almost all of them of great beauty and elegance, but still so Mediæval that neither their dates nor the names of their architects can be very satisfactorily ascertained.

In the next half-century (1630-1680) the Architecture of the city was in the hands of San Michele, Sansovino, Palladio, Da Ponte, and Scamozzi; and it is to this period that Venice owes its grandest architectural development and its most striking buildings.

In the century that followed we have the works of Longhena, Benoni, Tenanza, and other less known names, and many of the richest, though the least tasteful of the palaces of that city, were erected from their designs. After 1780 the city may be said to have ceased to build, and what has since been done has been by the French and Germans.

The modern architectural history of Venice is thus comprised in the two centuries that elapsed from 1485 to 1685, and this is divided into two nearly equal halves. In the first we have an elegant and tasteful style, free from most of the faults of the Renaissance, and combining picturesqueness with appropriateness. In the second the style is statelier and more classical, but far less picturesque; and the designs seldom escape from displaying a style of ornamentation at variance with the internal arrangements or constructive necessities of the buildings.

In the first age we have the very remarkable churches mentioned above—Sta. Maria dei Miracoli (1480-89) and San Zaccaria. There is also the School of St. Mark, commenced after the fire in 1485, and that of San Rocco (1489), displaying a more ambitious attempt at Classicality, but without much elegance or success.

The great undertaking of this age was the rebuilding of the internal court of the Ducal Palace. It was commenced in 1486 by an architect of the name of Antonio Bregno, and finished in 1550 by another, of the name of Scarpagnino. The lower story of this is singularly well designed, the polygonal form of the piers giving great strength without heaviness, and the panelling giving elegance and accentuation without bad taste. The introduction of the pointed arch in the arcade above is not so happy. In itself, as frequently remarked before,¹ the pointed is not a pleasing form of arch; and, although the mode in which it is used in Gothic buildings remedies its inherent

¹ 'Handbook of Architecture,' *passim*.



50. North-Eastern Angle of Courtyard in Doge's Palace, Venice. From a Photograph.

defects, and renders it beautiful, when used nakedly it is always unpleasing. In the stories above this, the friezes are magnified into such broad belts of ornamental sculpture that they cease to be copies of Classical forms, and become in appearance what they are in reality, ornamental wall-spaces between the stories. This, with the panelling between the windows, makes up a design singularly pleasing for the decoration of a courtyard, though it wants the symmetry which would render it suitable for a façade which could be seen at once, and grasped as a whole. The arcades¹ on the ground floor of the two other sides of this courtyard are in the same style and of the same age as those of the façade just described. In fact, the whole wall, from the pavement up to the cornice, was built when the palace was re-

¹ The northern façade of the School of Mines in Piccadilly is copied from this courtyard—the arcades of the lower story literally;

the upper story with some modifications, which are improvements, but still very like the original.

modelled at this period; but, as the upper part stood upon arches of Cinque-cento design, it was not thought necessary to Gothicise them in the courtyard, as was done with the windows on the external façades. The upper external walls, being erected over the arcades of the older Gothic building which were retained, were treated as we now find them in order to harmonise with their substructure.

The upper part of the walls in the court is left in plain brickwork, and the windows with only very slight ornamental mouldings, and these are of the Cinque-cento style of the period, though the opposite external windows, of the same age, in the same room, are designed with Gothic forms. Possibly it was intended to stucco the inner wall and paint it in fresco; but if so, this intention was never carried out, and it has now a meagre and discordant effect as compared with either the façades attached to the basilica of St. Mark's, or the eastern, which was the residence proper of the Doge.

Next in importance to this are the Procuratie Vecchie, occupying the northern side of the Piazza of St. Mark, though they are far from being a pleasing example of the style, being far too attenuated for architectural effect. The lower arcades are wide, and the piers weak in themselves, and doubly so in appearance, when it is seen that each has to support two smaller arcades, the piers of one of which stand on the crown of the lower arch. The deep frieze of the upper storey pierced with circular windows is also objectionable, but not so much so as the strange battlement that crowns the whole. Nearly the same remarks apply to the Clock Tower, which finishes the range towards St. Mark's, which can only be called picturesque and inoffensive, for when examined critically it really has no kind of architectural merit. Both these buildings would be open to harsher criticism than even this if found elsewhere; but the climate, the adjuncts, and the memories of the spot, induce most tourists and many architects to overlook those defects, and only to consider them as parts of a great whole, the beauty of whose grouping conceals the deficiencies of the parts of which it is composed.

Of the palaces of this age, the largest, and perhaps the grandest, is the Trevisano. Its façade is 85 ft. wide, and 75 in height, divided into four stories. To some extent it has the same defect as the buildings last mentioned of too great lightness, but the relief afforded by the more solid parts on either flank remedies this to a very great extent, and makes it on the whole a very pleasing composition.

The *chefs-d'œuvre* of the style, however, are the Palazzi Vandramini and the original Cornaro, the former being perhaps without exception the most beautiful in Venice. Nothing can exceed the beauty of the proportions of the three cornices, and the dignity of that which crowns the whole. The base, too, is sufficiently solid without being heavy, and, the windows being all mullioned, and the spaces between reinforced with three-quarter columns, there is no appearance of weakness anywhere; while there is almost as much opening for light and air as in the Palazzo Trevisano, or any building of its age. The Cornaro is similar in design, except that its base is higher and more solid, and



31.

Vandramini Palace, Venice. From a Photograph.

there are only two windows instead of three in the centre. In both, the details are designed with singular elegance, and what ornament there is, besides being appropriate and good, is so arranged that it shall supplement the "Orders," and as it were link the parts together, so that the whole shall appear part of one original design. There is perhaps no other modern building in which Classical pillars are used with so little feeling that they are borrowed or uselessly applied; every part is equally rich and ornamental, and every ornament seems designed for the place where it is found. The dimensions of the façade of the Vandramini Palace are less than those of the Trevisano, being only 80 ft. by 65 in height; but this is sufficient to give all the effect required in such a design as this.

The Palazzo Camerlinghi, close to the Rialto, is another building of the same class, said to have been finished in 1525, and shows the same elegance of detail which characterizes all the buildings of the age, though the disposition of the parts is not so happy in this as in those last quoted; and the excess of window-space gives to the whole design a degree of weakness almost equal to that of the Procuratie Vecchie, and which is very destructive of true architectural effect.

This excess of lightness is in fact the principal defect in the

Venetian designs of this age, and is the more remarkable when contrasted with the opposite characteristic in those of Florence. It may be argued that, if the internal arrangements of the buildings required it, the true principle of good architecture is that it should be supplied. This is quite true; but if utilitarian exigencies are made to govern the artistic absolutely, it may happen that the design is taken out of the category of Fine Art, and reduced to being a mere example of practical building. The taste displayed, and the amount of ornament exhibited in these early Venetian examples, are quite sufficient to save

them from this reproach, though, from their want of solidity and mass, they sometimes narrowly escape it.

San Micheli's¹ masterpiece is the design of the Palace of the Grimani — now the Post-office (Woodcut No. 6). It does not appear to have been quite finished at his death, in 1549, but substantially it is his, and, though not so pleasing as some of the earlier palaces, is a stately and appropriate building. It would, perhaps, have been better if the lower Order had been omitted altogether; and the division of the square openings in the upper stories, by the cornice of the smaller Order being carried across them, is not a very intelligible feature. These, however, are minor defects, and are scarcely worthy of being remarked upon, when compared with the blemishes that can be pointed out in the works of other architects of the same period.

The proportions of the whole

façade are good, and its dimensions, 92 ft. wide by 98 in height, give it a dignity which renders it one of the most striking façades on the Grand Canal, while the judgment displayed in the design elevates it into being one of the best buildings of the age in which it was erected.

The great Cornaro Palace, commenced in 1532 from designs by Sansovino,² is somewhat larger in dimensions, and richer in detail. Its width is 104 feet, its height to the top of the cornice 97; and there is a quantity of ornamental sculpture introduced into the spandrels of the arches, and elsewhere, which might as well have been omitted.



52. End Elevation of Palazzo Cumerlenga, Venice.
From Cleonara.

¹ Born 1484; died 1549.

² Born 1479; died 1570.

The rustication of the base, however, gives dignity to the whole, but the coupling of all the pillars of the upper stories is productive of a great amount of monotony, which is added to, by the repetition of similar arcades throughout the two upper stories, without any grouping in the centre or any solid masses at the angles. The insertion also of oval windows in the frieze of the crowning cornice detracts very much from the dignity of the design. These defects, however, are very far redeemed by the beauty of its details and the general grandeur of the whole design.¹

The masterpiece of this architect at Venice is the Library in the Piazzetta, opposite the Doge's Palace. It consists of a lower open arcade of the Doric order, treated with great boldness, and with a well-designed entablature. Above this is a glazed arcade of the Ionic order, surmounted by an entablature of most disproportionate dimensions. This defect is partly redeemed by the motive being apparent, which was, to admit of the introduction of a range of windows in the frieze. If an architect must use an Order, such adaptations may be regarded as traits of genius in so far as he individually is concerned, but they only tend to make more glaring the defects of the principle which forces him to such makeshifts. Notwithstanding this and some minor defects, principally arising from too profuse a use of sculptured decorations, there is a grandeur in the range of twenty-one similar arcades extending through 270 feet, and a boldness in its crowning members, which is singularly pleasing; and if the architect would only let us forget that he was thinking of the Flavian Amphitheatre, we must admit his design to be one of the most beautiful of its age and style.

Beautiful as this building is, and well worthy of study for its own sake, it is still more so from the position in which it happens to be placed. Situated exactly facing the Doge's Palace, and of nearly the same dimensions in plan, it is also so nearly similar in design that nowhere is so favourable an opportunity offered for judging of the comparative merits of the two styles as in this instance. If not quite, they are at least among, the very best specimens of their respective classes. The Palace, it is true, gains immensely in dignity by the mass superimposed on its arcades; so that its dimensions rather overpower the Library; but, on the other hand, the dimensions of the arcades of the Library so much exceed those of the Palace as to restore the equilibrium, to some extent at least.

In analyzing Sansovino's design, the great defect appears to be that the architectural ornament is not necessarily part of the construction. It is, nevertheless, so well managed here that it nowhere seems opposed to it; still it is felt that it might be away, or another class of ornamentation used, and the building not only stand, but perhaps look as well, or better. More than this, there is a quantity of sculptured ornament, figures in the spandrels, boys and wreaths in the frieze, and foliage elsewhere, which not only is not construction, but does not even

¹ The Army and Navy Club, Pall Mall, is practically a copy of this palace; the middle story being omitted, and some ornaments introduced which are not in the original.



53.

End Elevation of Library of St. Mark, Venice. From Ciognara

suggest it. If all this were omitted, the building would be relieved from that confusion of parts which is one of its principal defects; or, if enrichment were necessary, more conventional architectural ornament would have attained the same end; and if it could have been made to suggest construction, so much the better.

In the arcades of the Palace there is not one single feature or one single moulding which is not either construction, or does not suggest it. The sculptured enrichments are entirely subordinate to the architecture, and truthfulness pervades every part. Although, therefore, its scale of parts is smaller, and its features generally less elegant, it

is so essentially architecture, and nothing else, that judgment must probably be given in favour of the arcades of the Palace, when weighed fairly against those of the Library; though a very little more sobriety and taste on the part of the architect of the latter might have turned the scales the other way.

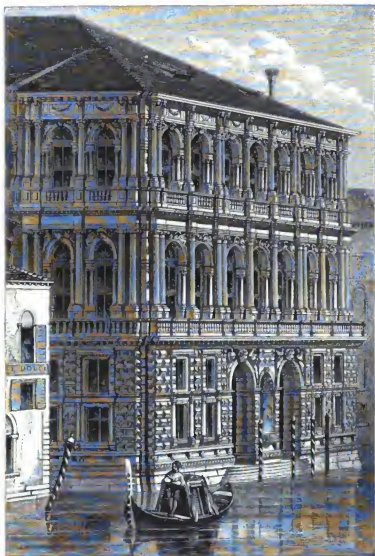
It is evident that the extraordinary depth of the upper cornice of the Library is not the worst defect of the building, for when Scamozzi¹ undertook, in 1584, to continue the two lower ranges along the whole south side of the Piazza di San Marco, he cut down the entablature to within the prescribed limits, and substituted a full-grown storey of the Corinthian order instead. Though the additional height was necessary in this instance, and ought to have increased the dignity of the building, the substitution did not improve the design, and the want of a sufficiently important crowning cornice is felt painfully in this, as it is in most of the designs of this age. There are also some minor defects of detail, which render this, as they do most of Scamozzi's designs, inferior to those of Sansovino. These, however, were, it must be confessed, faults more of the age than of the architect.

Palladio did not build any palace at Venice of sufficient importance to be quoted as an example of his style; but the courts of the Convent de la Carita are so favourite a design of his own, and so much praised by his admirers, that it cannot be passed over in silence. The principal court is, or rather was intended to be, surrounded by a double arcade of considerable dimensions, and, like all his designs, elegant in detail and pleasing in general proportions. Above these is a third storey, with square windows between Corinthian pilasters. As here used, this cannot be said to be objectionable; though placing the more solid over the lighter parts of the design is hardly ever a desirable mode of proceeding. The other court was to have had four tall Corinthian pillars on each side, supporting what was supposed to be the reproduction of a hypæthral roof. The sides of the court were plain, but showed two stories of windows, and the eight great pillars must have so dwarfed its dimensions as to render it almost as clumsy a design as ever was perpetrated; it was, in fact, one of the many instances in which either his own taste or the spirit of his age forced Palladio to adopt the Michael-Angelesque mania for an exaggerated Order; without considering either the exigencies of the building to which it was to be applied, or its dwarfing effect on other parts of the design. Fortunately for Venice, there is no other instance of this perverted taste in any of the civil or domestic buildings of the great age.

The façade of the Prison towards the Canal, commenced in 1589, is a much-admired design by Antonio da Ponte,² though there is very little merit in it beyond an absence of that bad taste which began to display itself about this age. The design has also the defect—then becoming too common—of having no reference to the intention of the building to which it is applied; the elevation would be more suitable to a library or a club, or any civil building, than to a prison. This

¹ Born 1552; died 1616.

² Born 1512; died 1597.



54.

Pesaro Palace, Venice. From a drawing by Canaletto.

design contrasts, however, pleasingly with its pendant, the Zecca, commenced shortly after the year 1535, from the designs of Sansovino, though it is very unworthy of his fame. The rustication of the Orders, coupled with the great size of the openings, give it an incongruous character, singularly destructive of architectural effect.

One of the best known buildings of the declining age of Venetian

Art is the Dogana (Woodcut No. 34), which stands at the entrance of the Grand Canal, and was built by some unknown architect in the seventeenth century (1682?). Whatever may be its defects of style in detail, there is no building in Europe more happily designed to suit the spot in which it stands, or which is better proportioned to the surrounding objects. With these merits it would be difficult for an architect not to produce a building that must be more pleasing than many that are more correct.

To this last and declining age belong the churches of the Salute and Zobenigo, already spoken of above, and a large number of palaces, more remarkable for their richness of decoration than for the propriety of their designs. Still they are palaces, and palaces only. They are rich, striking, and generally placed not only where they can be seen to advantage, but where also they group pleasingly with the objects in their immediate vicinity. Two of the best of these are the Pisano and Rezzonico Palaces; but the most typical example is perhaps the Pesaro, built by Longhena,¹ which, though over ornamented, has no striking faults, such as two stories being run into one, or anything added for show or merely for effect. Though not in the purest taste, it still perfectly expresses the fact that it is the residence of a wealthy and luxurious noble, and is, taken as a whole, a singularly picturesque piece of Palatial Architecture. It will not stand comparison with the Vandramini or the earlier palaces of Venice for either purity of design or beauty of detail, and there is an absence of repose in any part, which detracts very much from the effect it might otherwise produce. The last defect would have been nearly avoided if there had been only one window on each side of the central group of three, instead of the two which we now find there, and the basement might have been made more solid without probably detracting from convenience. Still, from the water-line to the cornice, it is a rich, varied, and appropriate design, so beautiful as a whole that we can well afford to overlook any slight irregularities in detail.

There are in Venice one or two specimens of modern palatial art, erected within the limits of this century, but so cold, so lean, and unartistic, that we can well pardon the gorgeous—it may be half-barbaric—splendour of the previous age when we compare its productions with those of the soulless mediocrity that followed. Fortunately the modern buildings in Venice are few and far between, or the spell that renders it the most beautiful and the most romantic city of Europe might be broken. It is also the city where Domestic and Palatial Architecture can be studied to the greatest advantage. Florence presents only one form of the art, and that confined to one century. The Romans soon lost what little originality they ever had, but Venice, from the 13th to the 18th century, presents an uninterrupted series of palaces and smaller residences, all more or less ornamental, all appropriate to their purposes, and all in exact conformity with the prevailing feelings and taste of the age in which they were erected.

¹ Born about 1602; died 1682.

While other Italian cities have each some ten or twelve prominent structures on which their claim to architectural fame is based, Venice numbers her specimens by hundreds; and the residence of the simple citizen is often as artistic as the palace of the proudest noble. No other city possesses such a school of Architectural Art as applied to domestic purposes; and if we must look for types from which to originate a style suitable to our modern wants, it is among the Venetian examples of the early part of the 16th century that we shall probably find what is best suited to our purposes.

III.—ROME.

The architectural history of Rome differs in many respects from that of either Florence or Venice. So prosperous and so proud was Florence at the end of the thirteenth century, that she instructed her architect to prepare designs for a cathedral "of such extent and magnificence that nothing superior or more beautiful should remain to be desired from the power or industry of man;"¹ and from that time till the Renaissance she went on increasing in prosperity and power, and adorning the city with such buildings as those described above.

After the war of Chiozza in 1380, Venice was the proudest and the richest commercial city of the world, and her merchant princes lined her canals with their picturesque Gothic palaces, which still excite such admiration in their decay, while they testify to a degree of wealth and luxury utterly unknown to any other city of Europe in that age.

During the whole of the fourteenth century Rome was distracted by the contests of the Orsini and Colonna families, and by the disturbances consequent on the short-lived triumph of Cola Rienzi. These, and the series of tumults which forced the Popes into a long banishment at Avignon, had so reduced the city that, at their return in 1375, they found less than 17,000 inhabitants remaining in the capital. It required a century of repose before her princes recovered sufficiently from these disastrous times to have money to spare for architectural embellishments, and we consequently find her more deficient than almost any city of Italy in examples of Civil or Domestic Architecture of the Mediæval period. Rome possesses no buildings that can compare with the stern grandeur of the Florentine palaces, or the playful luxuriousness of those that adorn the canals of Venice.

The two earliest secular buildings of any importance in Rome are the so-called palaces of Venice: the great palace with the church of St. Mark adjoining, built about the year 1468 by Giuliano de Majano,² —the smaller by Baccio Pintelli³ in 1475. No buildings could well be more characteristic of the times in which they were erected, for externally they possess no architectural decoration whatever, being heavy machicolated masses, designed for use and defence, but certainly not for ornament; and it is only their courtyards that bring

¹ Giovanni Villani, 'Storia Fiorentina.'

² Born 1407; died 1477.

³ Born at Florence beginning of fifteenth century.

them into the class of objects of which we are now treating. These are adorned with colonnades in two stories, supporting arches; and the capitals of the columns, the archivolts, and the whole of the details are so elegant and appropriate that we cannot but feel that their architects were in the right path; and, had they persevered in using classical elegance without more direct copying than is found in this example, they might have produced a style as original as it would have been elegant. This, however, was probably impossible in a city like Rome, so full of the remains of

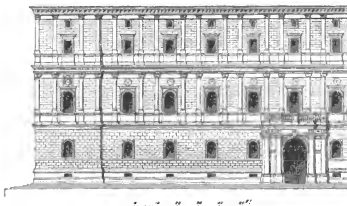
"The dead but sceptred sovereigns who still rule
Our spirits from their urns."

Except these two palaces, and some alterations and repairs, there is nothing that was done during the fifteenth century that need arrest the student of Architecture in Rome, in so far as the civil branch of the art is concerned; so that practically its history in this respect commences with the works of the great Florentine artists, Bramante, Peruzzi, Sansovino, Sangallo, and Michael Angelo, who were attracted to Rome by the splendid patronage and magnificent designs which have immortalized the age of Julius II. and Leo X. Practically therefore as concerns Rome we may consider Bramante as the earliest architect of the Renaissance, and the year 1500, when he commenced the Sora Palace, as the earliest date to start from.

The greatest work of Civil Architecture of this age was the Belvedere Court of the Vatican, proposed by Julius II., to unite two detached portions of the Palace, and commenced in 1506 from the designs of Bramante. The ground between these two buildings was very uneven and irregular; but all difficulties were surmounted with a degree of taste and skill which has seldom been surpassed. As originally designed, it consisted of a grand courtyard nearly 1100 ft. in length by 225 ft. in width. At the lower end, next St. Peter's, was an amphitheatre about 150 ft. in diameter, with raised steps, from which shows and spectacles in the courtyard could be conveniently seen, and on each side there were galleries in three stories, open on the side towards the court, surmounted by a fourth storey pierced only with windows. A little more than half-way from the amphitheatre, a double terrace, with magnificent flights of steps, led to a garden on a level with the floor of the upper arcade, which, with the upper storey, were alone continued round it; and beyond this was the magnificent alcove of the Belvedere, with an open semicircular colonnade on its roof.

The buildings of this court were carried on with such inconsiderate haste that their foundations failed before they were completed, and the requisite strengthening by no means added to their beauty. Its proportions also have now been entirely spoiled by the Vatican Library being built on the lower terrace, dividing it into two courts. This arrangement not only destroys all that was grand in the original conception of the court, but renders the two great niches or alcoves at the ends disproportioned to the smaller courts in which they now stand. Other alterations have since taken place, which render the original design scarcely recognisable.

The other great court of the Vatican, known as the Court of the Loggie, is also ascribed to Bramante, and it seems nearly certain that he commenced it, though it was most probably carried out architecturally, as it certainly was painted, by Raphael, and,—like the neighbouring Sistine Chapel, and many other buildings of the age,—it owes its fame and its merit far more to the fancy of the painter than to the skill of the architect. If Painting really is, for this purpose, a higher art than Architecture, and this is a legitimate application of it, these two buildings must be considered as the *chefs-d'œuvre* of Italian Art in this age; but in both cases it seems as if Painting had encroached unreasonably on the domains of her sister Art, and both have suffered in consequence. The Loggie, however, have suffered far less in this respect than the Chapel, for they were not capable of any higher class of adornment, whereas the Chapel afforded a field for architectural display which has been painfully neglected.¹



55.

Part of the Façade of the Cancelleria at Rome. From Letarouilly.

Two other very celebrated works of Bramante at Rome are the Palazzo Girand and the Cancelleria. Both are so similar in style that an illustration from one will suffice, as it shows all the beauties and defects of his style. If we are to judge from it of what St. Peter's would have been had the architect's design been carried out, we may feel assured that, like all he did, it would have been free from bad taste, elegant and classical, but not distinguished by any grandeur of conception in its parts, or any great originality of detail. So small indeed are all the parts of his buildings, that we cannot help suspecting that the conception of St. Peter's was due to the Pope rather than to his architect. He certainly was so bad a builder that the task he left to his successors was first to pull down and then to rebuild, before they could complete any of his works which he left unfinished.

The façade of the Cancelleria measures 300 ft. in length, 85 ft. 6 in.

¹ See Introduction, pp. 10 to 17.

in height to the top of the cornice, and is divided into three great stories, or rather divisions,—the lower rusticated, the two upper ornamented by pilasters, very much in the manner of the Rucellai Palace at Florence (Woodcut No. 48), but not so successfully. Here the Order is so widely spaced, and, owing to the introduction of pedestals to each of the pillars, so small, as to become comparatively insignificant, and merely ornamental, without any pretence of structural propriety, and the introduction of a second storey in the upper division further detracts from the truthfulness of the whole. Notwithstanding these defects, there is an elegance about the details, and an absence of anything offensively misplaced or vulgar, which renders it an extremely pleasing design; and we dwell on its beauties with the more pleasure because we feel that we are so nearly approaching the dreadful vulgarities of Michael Angelo which were perpetuated so soon after the time of Bramante.

Next in age and importance to Bramante was Baldassare Peruzzi,¹ who, between the years 1510 and 1534, built some ten or twelve palaces in Rome. One of the most elegant of these is the Farnesina, a villa not far from the great Farnese Palace, but on the other side of the Tiber. Its principal front is recessed between two projecting wings of the same design, the whole consisting of two stories of arcades with pilasters between, and with a deep frieze to the upper Order, into which are introduced little square windows; thus making it, on a smaller scale, not unlike Sansovino's design for the Library at Venice. Like many of the buildings of this age, the Farnesina is more celebrated for its frescoes, representing the Loves of Cupid and Psyche, after the designs of Raphael, than for its architectural design, which, though elegant, can hardly be said to be remarkable either for taste or grandeur.

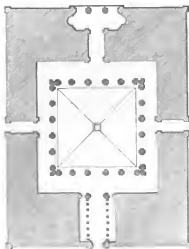
A still more celebrated design of his is the Pietro Massimi Palace, which shows considerable ingenuity of adaptation to an irregular site. Many pleasing effects are also gained internally by its being combined with the Angelo Massimi Palace, and the variety arising from these being placed at different angles the one from the other; but beyond the study and ingenuity which this combination displays, and the general elegance of the details, there is nothing very remarkable in the design, nor that would attract much attention anywhere else. The Ossoli Palace (1525) is a better, but a tamer design, and certainly unworthy of the fame it has acquired. Peruzzi, like Bramante, seldom offends by vulgarity, and, building, as he did, among the ruins of ancient Rome, his details are generally good and elegant; but his style is a painful contrast to the grandeur of that of Florence, or the richness of the contemporary buildings at Venice.

We turn therefore with pleasure to the great Farnese Palace, commenced in 1530 by Antonio da Sangallo,² which, taking it with all its faults, is still one of the grandest palatial designs in Italy. In the first place, its dimensions are most imposing, as it consists of an im-

¹ Born 1481; died 1536.

² Born 1470; died 1546.

mense cubical mass, 260 ft. on the side by 192 in front, and its three great stories reach 97 ft. to the top of the cornice. Besides these dimensions, there is a simplicity in the design which is only surpassed by the great Florentine examples. On the front and flanks the lower storey is almost too plain, consisting merely of a range of square-headed windows, broken in the centre of the front by a rusticated arched *portecochère*. On the principal floor the windows in the centre are grouped together to such an extent as to give rather an appearance of weakness, considering the great mass over them. Above this Sangallo seems—



56. Block Plan of the Farnese Palace at Rome.
Scale 100 feet to 1 inch.

less important storey, crowned by a complete Corinthian entablature, the dimensions of which were determined by pilasters at the angles, running through the two upper stories. At this point Michael Angelo was called in, and designed the cornice, which is the pride of the building, and the grandest architectural feature in modern Rome. Its projection and dimensions are such as would be appropriate to an Order running through all the three stories; but, fortunately, the pilasters which Sangallo suggested, and the architrave, are omitted, and it thus becomes a noble cornice, without any imitative classicality. While we have to thank this great man for this feature, it is feared that we owe to him the upper range of round-

headed windows, which are as vulgar and as bad in design as anything that was ever done, and are here totally inexcusable. There was more than sufficient height to have carried the entablature of the Order which adorns the windows across them above the opening, without breaking it: but merely to insert a block of it over the pillars, and run the arches into the pediment, was a most unpardonable mistake in such a situation.

The original design contemplated two courts, and from this cause, apparently, the rear front was left unfinished, which enabled Giacomo della Porta to insert the central compartment in three arcades, which, though pleasing in itself, is inappropriate here, and to a great extent mars a design with which it might easily have been brought into harmony by a slightly bolder treatment.

This is, nevertheless, the façade chosen for illustration (Woodcut No. 57), inasmuch as it brings into instructive contrast the two great principles of design then in vogue in Rome—the *Astylar*, which may also be called the Florentine style, and the *Arched*, or “*Amphi-*



57. Front of the Farnese Palace, Rome. Scale 100 feet to 1 inch. From Letarouilly.

theatral,"—if such a word may be introduced,—which may be designated the Roman. For external purposes, there can be no doubt but that the former was by far the most suitable. It could not indeed be used with the same simplicity as is found in the Farnese or at Florence, except in buildings on as large a scale; but it could easily have been ornamented by panellings, mouldings, and window dressings, till it was *petite* enough for suburban villas, without ever losing its propriety of proportion. The other, or Arcaded style, was equally suitable for courtyards, especially in such a climate as Italy, but never could attain the dignity of the Astylar as an external mode of decorative art.

The courtyard of the Farnese is an exact square in plan, 90 ft. each way, and is surrounded by bold and deep arcades in three stories, the upper one, as usual, filled in with windows. The whole is very grand, and not inappropriate to the bold simplicity of the exterior; but its effect is considerably marred by the vulgar and fantastic details in which Michael Angelo revelled, and which, though excusable with his style of painting, are most destructive of architectural effect. It is impossible, indeed, to help perceiving that the brush, and not the square and rule, was the instrument with which all his designs were made. All these fantastic contrasts, which may be necessary for architectural decoration painted on a flat surface, are introduced by him, both here and elsewhere, in hard stone in relief. The effect is not only most unpleasing in his own designs, but was fatal in the school of imitators who with less genius sought to follow his example.

Sangallo's other two great palaces—the Palma, built in 1506, and the Sacchetti, in 1540—are characterized by all the good taste and extreme simplicity of design which is found in his part of the Farnese. To such an extent did he carry this, that it may almost be said to amount to baldness in Palatial Architecture, though it might be appropriate in works of a more monumental character.

Sansovino did very little in Rome, and that little is not remarkable

for any striking qualities. His contemporary Giulio Romano¹—almost the only architect of this age who was a native of Rome—built several palaces, and introduced in his buildings the same weak, tricky style which characterizes his painting. An exception ought perhaps to be made in favour of the Villa Madama, which, if neither very grand nor beautiful, is at least free from bad taste, and has some pleasing points of design.

There are several palaces in Rome the designs of which are attributed to Raphael, but which may more probably belong to Giulio Romano, or some other of his contemporaries. This is of little consequence; for though it is certain Raphael did sketch designs for palaces, it is not so clear that he ever practically carried them out; and at a period when so much was borrowed from the classical ages, and so little really invented by the artist, there was not much left for the architect but the arrangement of the parts. There was, consequently, but little scope for Raphael's peculiar talent for gentle elegance, while the vulgar energy of his great rival made itself everywhere felt.



58.

Museum in the Capitol at Rome. From Letarouilly.

The only great group of Civic buildings in Rome which display Michael Angelo's taste in design, are those in the Capitol. It is true the Palace of the Senators, commenced by him in 1563, was finished by another hand after his death, but the Museum and the Palace of the Conservatori are entirely his. They were commenced about the year 1542, and are early specimens of the style of Corinthian pilasters running through two stories, which afterwards became so fashionable, and, it must be admitted, are used here with a vigour which goes far to redeem the impropriety of their introduction. The details of the windows are better than is usual in this artist's works, and the whole bears the impress of the hand of a giant in Art, but tinged with that vulgarity, from which giants, it is feared, are seldom, if ever, free.

Giacomo Barozzi da Vignola,² one of the most celebrated architects of this period, not only adorned Rome with some of its most elegant buildings, but, with his contemporary Palladio,³ may be said to have

¹ Born 1492; died 1546.² Born 1507; died 1573.³ Born 1518; died 1580.

completed the first period of the Renaissance. During the half-century that preceded their advent, the last remnant of Gothic feeling had been banished from Italy, and the whole tendency of the age was towards a revival of the Classic style. The architects of this epoch, however, had by no means consented to a system of literal copying, but hoped, out of the details and elegancies of Classic Art, to create a new and original style, adapted to their own purposes.

From long and enthusiastic study of the great remnants of antiquity, these two men became so imbued with admiration for the works they were studying, that they never afterwards could emancipate themselves from the feeling that Classical Art alone was worthy of study, and that it could not be imitated with too great minuteness, or reproduced with too great exactness. Having in consequence thoroughly mastered the subject of their studies, they devoted their lives to forwarding what seemed to them so all-important,¹ and, both by their writings and their practice, they sought, and sought successfully, to fix the principles of their art on the basis of this literal reproduction of the great models of antiquity. Not only did they fix the exact proportions of each of the so-called "Orders," and the profile of every moulding, but they established canons for the superposition of Orders on one another, and in short fixed on the Renaissance those principles which gave it its distinctive character, but which also ensured its eventual decay. The human mind cannot rest satisfied without progress, and where the main principles of an art are fixed by arbitrary rules beyond appeal, men are driven to *bizarries* in detail, in order to produce new effects, and the incongruities between the parts become daily more and more apparent. This was not felt in the age of Vignola and Palladio, whose works, though generally tame, are always elegant, and by the correctness of their classical details disarm the critic, who is bound to judge of them by the standard according to which they were designed.

At Rome Vignola was not fortunate in having any great work to design and carry out entirely by himself, though many of the palaces owe some of their greatest beauties to his assistance. There are several small palaces, one especially in the Piazza Navona, which display all the elegance of proportion and beauty of detail which distinguish this architect. His best work, however, is perhaps the villa of Pope Julius, outside the Flaminian Gate. He did not complete the whole, but the façade (Woodcut No. 59) is certainly his, and displays those peculiarities of design which produced such an effect throughout Europe that every detail of this building may be found repeated over and over again on this side of the Alps. There is not perhaps much grandeur or any very remarkable feature about this design, but there is an entire absence of bad taste or of any false principles, which in

¹ Modern architects by study of mediæval cathedrals, &c., have arrived at precisely the same stage of fascination with their beauties which their predecessors of the sixteenth century reached in regard to Classic Art. They

would of course feel indignant if told that their illicit affections must share the same fate as those of the Palladian school; but so certain as that we are now a civilized people is it that the reaction is not far off.

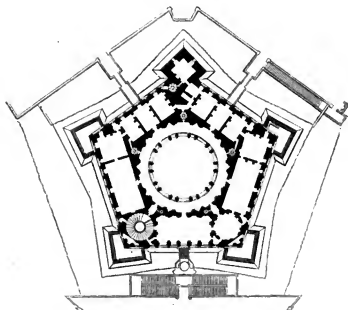


59.

Villa of Pope Julius, near Rome. From Letarouilly.

that age is great praise. Another small summer-house called the Vigna, attached to this villa, is also partly of his design, and the two together form perhaps the most elegant specimen of villa Architecture that Italy can boast of. If there is not the same amount of elaboration in these as is found in any Gothic design, it is simply that they are little more than one man's contribution of thought—a Medieval design includes that of hundreds. If architects of that age had been content to follow the path pointed out in such designs as these, the defects would very soon have been remedied, but to do so would have required an amount of self-denial which was hardly to be expected, and certainly was not obtained.

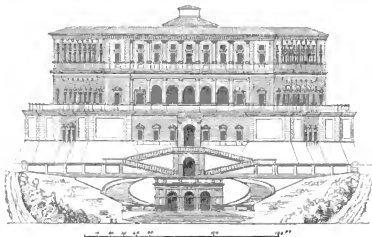
Vignola's great work, however, and that by which he is best known, is the Palace of Caprarola, which he built some thirty miles from Rome, for the Cardinal Alessandro Farnese. The plan is unique, or nearly so, being a pentagon, enclosing a circular court. Each of the five sides measures 130 ft. on plan, and the court is 65 ft. in diameter, while the three stories are each about 30 ft. in height; so that its dimensions are very considerable, and certainly quite sufficiently so for palatial purposes. The object of adopting the form here used, was to give it a fortified or castellated appearance, as all citadels of that age were pentagons, and this palace is accordingly furnished with small sham bastions at each angle, which are supposed to suggest that idea of defensibility, so dear to the builders of castellated mansions at the pre-



60.

Plan of the Palace of Caprarola. Scale 100 feet to 1 inch.

sent day. Above the terrace formed by these bastions and their curtains, the palace rises in two grand stories of "Orders," the lower arcaded in the centre, the upper including two stories of windows. This last is certainly a defect, but, notwithstanding this, the whole is so well designed, the angles are so bold, and the details are so elegant,



61.

Palace of Caprarola, near Rome.

that it is one of the finest palaces in Italy; and we may admire the ingenuity of the architect the more, because the pentagonal form is singularly unfavourable to architectural effect externally, or to commodious arrangements inside, and the site also is such that from most points it looks too high for its other dimensions. But all these defects have been overcome in a manner that makes us regret that its architect was not more employed on the great works of his day. At St. Peter's he only added the two small cupolas, one on each side of the dome, and made some slight repairs or improvements to the other great churches of Rome.

The façade of the Collegio della Sapienza, built by Giacomo della Porta, in the year 1575, deserves to be quoted as one of the most successful of its class in Rome, showing how much may be effected by mere justness of proportion and elegance of detail, and as illustrating the value of a solid and unadorned basement to anything that can be



62.

Façade of the Collegio della Sapienza. From Letarouilly.

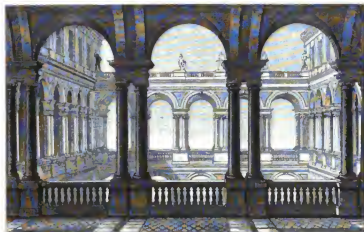
placed upon it. Unfortunately such examples are rare, and the temptation to spread pilasters over such a surface has ruined half the façades of Italy.

Of a very different character to this is the Collegio Romano, the façade of which was built in the year 1582, by Bartolomeo Ammanati,¹ and which, though free from the defects of unmeaning Classicity, is designed in a style quite as unconstructive, and far more devoid of elegance; the whole façade being divided into gigantic panels, enclosing groups of windows, but neither representing the external construction nor internal arrangements.

Nearly the same criticism applies, though in a somewhat less degree, to the great Borghese Palace, built from the designs of Martino Lunghi the elder, about the year 1590. Its courtyard, however, is singularly well proportioned, and a favourable example of what in most cases is the most pleasing as well as the most characteristic feature of an Italian palace, though it is one that generally admits of less variety of design than any other part. In this instance however

¹ Born 1511; died 1592.

the objection is obviated by one side of the courtyard being an arcade, only two stories in height, and opening into the garden, affording a prospect of scenic beauty and variety from the three other sides.



63. Cortile of the Borghese Palace. From Letarouilly.

The Laterano Palace (Woodcuts No. 31 and 32), built from designs of Dominio Fontana,¹ about this period (1586), is little better than a bad copy of the Farnese; the smaller scale of its parts, and the fact of the cornice being cut up by a range of small square windows inserted in the frieze, destroying entirely the massive dignity of its prototype.

The Barberini Palace, in so far as size or richness of detail is concerned, is one of the most remarkable of the Roman palaces; but unfortunately its architects were Carlo Maderno, Borromini,² and Bernini,³ and it was commenced at a time (1624 to 1630) when Architecture in Rome had already begun to decline, and caprice to take the place of the simplicity of the school of Sangallo, or the purity of that of Vignola. Notwithstanding defects, both in design and detail, the dimensions of this palace are such as to give it an air of magnificence, and its broken outline also renders it more picturesque than most of those of Rome. It may also be added in its praise, that each storey is carefully distinguished by its own Order, and it has escaped the bad taste and bad grammar which Michael Angelo rendered fashionable. It may also be remarked that it possesses another merit in common with most of the Roman palaces, of being finished and complete all round. In Venice, as remarked above, even the best façades are generally only *appliquées*; if the design be returned at all, it is only to the extent of one, or at most only two bays round the corner, and all the rest is mean and commonplace. This is a sad mistake in an architectural point of view, and detracts very considerably from the beauty of the

¹ Born 1543; died 1607.

² Born 1599; died 1667.

³ Born 1598; died 1680.

Venetian designs. At Rome, on the contrary, though no one façade may be so rich as those of Venice, the ornament is spread much more equally over the whole, and the buildings acquire an immense degree of dignity and importance from having no mean parts anywhere visible.



64.

View of the Barberini Palace, Rome. From Letarouilly.

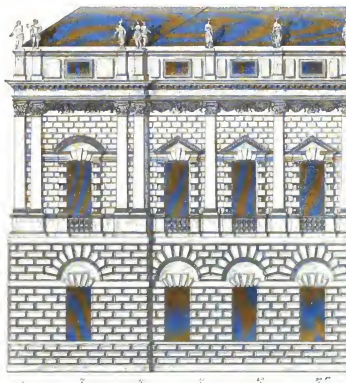
It would be tedious to attempt to enumerate all the other palaces or civil buildings which continued to be erected at Rome during the seventeenth and eighteenth centuries. Many are remarkable for their size, several by the richness of their façades, but none of them can be considered either as objects worthy of admiration, or as models to be followed in designing others.

It will be well, therefore (at first at least), to turn to the other cities of Italy which possess buildings of the earlier period of the Renaissance, in order that we may understand what really were the aims of the architects of the period, and see how far they succeeded in attaining to them.

IV.—VICENZA.

Vicenza is a city dear to all admirers of the Renaissance style, not only as being the birthplace of Palladio, but as containing by far the greatest number, as well as the most celebrated productions of his genius. Strange to say, it is not, however, in Vicenza that these can be studied to the greatest advantage, as, unfortunately, most of them are of brick concealed under stucco, and are constructed with wooden architraves, and all the shams we blame so much in the Architecture of the present day. The city, too, is now sunk into decay, and most of its palaces are deserted, so that the buildings themselves have an

air of shabby decay most destructive to architectural effect, and are in consequence better studied in drawings, and in the numberless copies of them which exist in this and other countries on this side of the Alps.



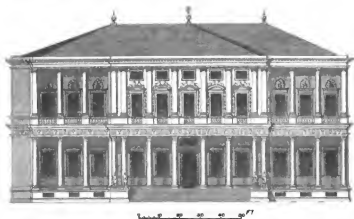
65. Part of Façade of the Tione Palace, Vicenza. From Palladio's 'Architettura.'

An illustration of the Valmarina Palace has already been given (page 28, Woodcut No. 7), as an example of Palladianism in excess. Its defects, however, are even more apparent on the spot than in the drawings, inasmuch as it is situated on one side of a street so narrow that it is impossible to get far enough away to obtain a good view of it. An architect might be excused for exaggerating his details, if his building were to be placed on one side of a very large piazza, or at the end of a very long vista; but in a narrow street the details of a façade ought to be designed almost as if for an interior—as things which must be seen near, and can only be grasped in detail.

It is probable that the Tione Palace owes its design, in part at least, to its proprietor. It is, however, always published in Palladio's works, and generally quoted as one of his most successful designs. All its parts are indeed good in themselves, but they are put together in a

manner by no means creditable to the architect. The basement is rusticated with more than Herculean boldness; but when it is perceived—which cannot be concealed—that it is only brick covered with stucco, the effect is far from pleasing, and it is less so when it is considered that this tremendous rustication is only designed to support a range of delicate Corinthian pilasters. Between these, however, are windows, rusticated with all the rudeness of the basement, but again, the whole is crowned by an entablature belonging to the Corinthian Order. Palladio's taste redeems these incongruities to a certain extent, but it was inexcusable to use such a rustication with the materials employed, and still more so to combine a Corinthian Order with features so little in accordance with its delicate elegance.

Internally the arrangement is better. The arcades of both stories are well proportioned and elegant, and though it would have been better if the attic could have been omitted, it is well kept under, and therefore as little obtrusive as could be expected.



66. Elevation of Chiericatte Palace, Vicenza. From Palladio's 'Architettura.'

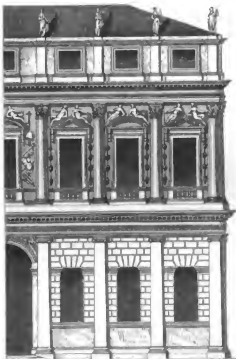
It is seldom, however, that Palladio confined himself to a single Order in only one storey. In the Valmarina and Barbarano it runs through two; and as in the court of the Carita at Venice we find in the Porto Palace, that the court is surrounded by twenty great columns of the Composite Order, supporting, at half their height, a gallery, on Corinthian pilasters stuck to their backs. A more common arrangement in Palladio's buildings was to place one Order above the other. In the wings of the Chiericatte Palace, where both stand free, this is comparatively unobjectionable; but in the centre, where the upper Order is filled in with windows, and consequently the solids are placed over the voids, the effect is most displeasing. At Vicenza this is, notwithstanding, considered one of Palladio's best designs, and has recently been put into a state of thorough repair, and appropriated as the museum and picture-gallery of the town. It is therefore seen as

Palladio designed and finished it, and the result is certainly very unworthy of his fame. A building open and weak at the angles, and solid in the centre, is always unsatisfactory, though the defect occurs in the Valmarina and others of his designs; but when we add to this that the centre is full above, and weak below, we have probably enumerated all the worst elements that can well be introduced into the arrangement of a design. Nothing, in fact, redeems this façade but that exquisite proportion of parts, and that indefinable elegance of detail, which disarm the critic of Palladio's works, and, in spite of the worst possible designs, still leave a pleasing impression on the mind of the spectator.

Taking it all in all, the annexed design for the Barbarano Palace perhaps shows Palladio's style to the best advantage. The proportion of the Orders one to another is good, so is that of the solids to the voids, and the whole has a palatial ornamental air, and with as little false decoration as is perhaps compatible with the style. Still it certainly would have been better if the figures over the pediments and the wreaths dependent from the brackets had been omitted; or, if more ornament was desired, paneling or paterne would have supplied their place as effectually and far more appropriately.

One of this architect's most admired designs is the Rotunda, or Villa del Capra, in the neighbourhood of this city. It is a square of about 70 ft. each way, with a recessed portico on each face, of the Ionic order, and enclosing a domical apartment of 30 ft. diameter in the centre. It is perhaps the most classical and temple-like design ever applied to Domestic Architecture,

and has in consequence been so much admired that in this country it has been repeated four or five times over, and copies, more or less exact, are found in every



67. Barbarano Palace,¹ Vicenza. From Palladio's 'Architettura.'

¹ The exterior of the Porto Palace is almost identical with this, except that the lower Order is omitted.



68.

Villa del Capra, near Vicenza. From Palladio.

country of Europe. It certainly is not suited to domestic purposes, especially in northern climes; but there is a charm about it which it is impossible to deny, and it possesses as few offences against constructive propriety as any design of the sort which has yet been produced, and may safely be regarded as one of the most successful efforts of this architect's genius. Its situation, too, is such as almost to excuse it from the charge of affectation in applying Temple Architecture to domestic purposes, for it stands on a rounded grassy knoll, seen from below on all sides, and fits most gracefully to its situation. Anything less regular or less monumental would have been out of place there, but the copies of it that exist in this country have none of them this excuse, and without such a site a four-porticoed house must always be more or less an anomaly.

If we take into consideration the difficulties Palladio had to encounter, we must feel that he showed even more talent in the manner in which he rebuilt the arcades round the Mediæval basilica of his native city than he displayed in works already noticed. In order to understand what he had to do here, it is necessary to cast a glance at the basilica of Padua, which still retains its pointed-arched arcades; and if we compare the two, we shall see at once not only how successfully Palladio adapted the new mode of decoration to the old form, but why the Italians so willingly and so enthusiastically abandoned their Mediæval style for the revived Classical. We, on this side of the Alps, had not their excuse, for our Gothic was an elegant and perfect style, theirs an incomplete and clumsy borrowing from the northern nations. So much is this the case, that even now the veriest *fanatico* for Mediæval Art must admit the superiority of the external appearance of the Vicentine over the Paduan basilica as they now stand.

One of the great difficulties Palladio had to contend with was that he was obliged to make one opening of his arcade correspond with two openings of the hall. This obliged him to widen his arcades more than was quite desirable, but, as they had nothing to carry beyond their own weight, this is comparatively of little consequence; and by break-



69.

End Elevation of Basilica at Vicenza. Scale 50 feet to 1 inch.

ing the entablature over his principal Order, he showed that it had really no work to do. This spreading of the seven central arcades enabled him to contract the angle ones, so as to accentuate and give strength exactly where it was wanted, and so to take off all that appearance of weakness, which, as noted above, is so common a fault in his designs, and makes the pains he has taken to avoid it here all the more remarkable.

Had Palladio done nothing else than this arcade, his fame would have stood higher than it does, and justly so; for, take it all in all, it is perhaps not too much to say that what he added to this great hall is the happiest adaptation of Classical Art to modern purposes which has yet been executed in Europe, and, though not faultless, it is on the whole less open to animadversion than any design of modern times.

If, indeed, all Palladio's designs were as beautiful and as appropriate as this, we should have little fault to find either with the style he adopted or his mode of applying it. But the task he imposed on himself, or rather that his age imposed on him, was one that no human ingenuity could successfully perform: it was to adapt the Temple Architecture of an extinct civilisation to the Ecclesiastical, the Municipal, and Domestic Architecture of his own time. That he failed is not to be wondered at; on the contrary, he deserves all praise for the extent to which he did succeed. We are always pleased in his works by the evidence of a refined and cultivated mind, joined with the innate perception of proportion and fitness which constitute the architectural faculty. We never see in them the broken pediments or contorted mouldings of Michael Angelo, or the unstructural caprices of Borromini or Guarini. Every feature and every moulding is used

apparently for the purpose for which it was designed, and always with elegance; and generally the solids are so well proportioned to the voids that the stability seems perfect, and the proportions of the masses are also generally well balanced. Against all this we have to remark that in nine cases out of ten the construction is one thing, the ornamentation totally distinct from it. This, it is true, was an inherent part of the problem, but, where it exists, true and satisfactory Architecture is impossible. This was not the case with the early Florentine or the early Roman Art, but it became so wherever the Orders were used to the extent and with the importance which Palladio gave them, and which, in fact, is the cause of all the defects of his architecture, and of that of his school.

V.—GENOA.

No city of Italy is more favourably situated for architectural display than Genoa, and, had its advantages been properly availed of, nothing would have been finer than the amphitheatre of palaces which might have arisen around her bay. Unfortunately, those which do line its shores and are seen from the sea are all the older and less ornamental buildings, which have in modern times been dreadfully mutilated and disfigured; first to widen the quay, and next to convert them into hotels and to other utilitarian uses, to which they are now almost without exception applied.

No two places in Italy form so marked a contrast in all their principal features as the rival cities of Venice and Genoa. In the first all is flat and levelled by the water-line of her streets; the other hardly possesses a foot of level ground, and half the streets are impassable for carriages, from their steepness. In Venice all is silence and decay; in Genoa all is bustle and noise; and the traveller has difficulty in preventing himself being run over in the principal streets—just wide enough for two carriages to pass, and not sufficiently so to allow trottoirs to be abstracted from the carriage-way. The Architecture of the two cities is even more strongly contrasted. Venice is full of Mediæval palaces of most romantic interest; Genoa has not one worthy of notice. When Venice adopted the Renaissance style, she used it with an aristocratic elegance that relieves even its most fantastic forms in the worst age. In Genoa there is a pretentious parvenu vulgarity in even the best examples, which offends in spite of considerable architectural merit. Their size, their grandeur, and their grouping may force us to admire the palaces of Genoa; but for real beauty, or architectural propriety of design, they will not stand a moment's comparison with the contemporary or earlier palaces of Florence, Rome, or Venice.

The true palatial magnificence of the city is confined to a range of narrow streets at the back of the town—the *Strade Balbi*, *Nuova*, and *Nuovissima*—which in the sixteenth century were added to it. These, with the exception of one or two small, confined *Piazzi*, comprise all that Genoa is most celebrated for; and, though the palaces

situated in these places are not perhaps worthy of all the praise that has been lavished on them, they form a splendid group, and have a local individuality and character which render them an interesting study when considered in juxtaposition with the other cities whose buildings have just been alluded to.

Galeazzo Alessi,¹ who was the architect of nine-tenths of the most remarkable buildings of Genoa, had none of the classical elegance of his contemporaries Palladio and Vignola; but his style was also free from the incongruities which their blind admiration of the antique induced them sometimes to introduce into their designs. Being, on the other hand, much more of an architect and less of a painter than Michael Angelo, he never fell into those unconstructive absurdities which disfigure all the buildings of that great man. He never ran gigantic pilasters through two or three stories, and then stuck attics on the top of them, so as to falsify the construction of the whole.

The real merit of the Genoese palaces is that they really are what they seem. If pilasters are used, they are mere decorations. Pillars are never introduced when not wanted; and, above all, the cornice is always the principal feature of the design, and always at the top of the wall—attics being almost unknown in Genoa; and windows are only introduced when and where they are wanted. With these elements it is difficult to fail; and Alessi only wanted a little more elegance in designing his details, and a little better material to work with, in order to have attained a great success. The last mentioned is in fact one of the principal defects of the Genoese buildings, though not the fault of the architect; for, though it is usual for tourists to talk glibly of the marble palaces of Genoa, it is a melancholy fact that, except some of the black and white mediæval edifices, there is not a single façade in the city built wholly of that material.

About one-third of the Genoese palaces are plain buildings of rubble masonry, covered with stucco—the windows without dressings, and the façade with scarcely an ornamental feature except the porch and the cornices. The intention was, not only to paint the architectural mouldings on the stucco, but to paint frescoes between them. This has been done in many instances, but in some it is so completely washed off that it is difficult to detect the traces of it; in some it exists in so faded a condition that the subject can hardly be made out; and in others it flares forth in all the staring vulgarity of pretentious newness.

One of the best examples of this style is the Palazzo Durazzo in the Strada Balbi. It is very doubtful whether its painting was ever carried out, and it certainly is better without it. To make a building of this class effective requires considerable dimensions, the openings large and as few as possible, and a cornice of bold projection; but with these elements it may be both grand and beautiful, and possess all the principal requirements of architectural excellence. Though as plain and devoid of ornament as it is almost possible for any design to be, this one is as effective and as pleasing as any palace in the city.

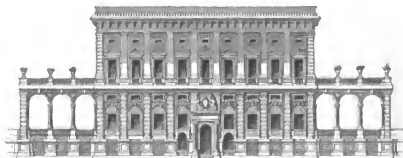
¹ Born 1500; died 1572.



70. Durazzo Palace, Genoa. From Gauthier. Scale 50 feet to 1 inch.

In a second class all the ornaments that were painted in the first are carried out in stucco; which is certainly an improvement on paint, but, in the hands of Galeazzo Alessi, is frequently offensive from its vulgarity, though fortunately not from its want of constructive propriety.

The Municipality in the Strada Nuova, formerly the Palazzo Tursi Doria, is the most admired example of this. The dimensions of this and the Durazzo Palace are very nearly identical; their extent, measured from the extremities of the wings, being about 200 feet,



71. Tursi Doria Palace, Genoa. From Gauthier. Scale 50 feet to 1 inch.

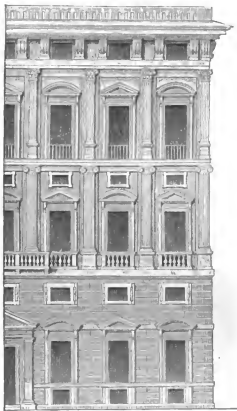
their height 85 feet, and their design is also very similar; but the ornaments of the Municipality give it a striking effect of richness and grandeur, which is considerably aided by the narrowness of the street, or rather lane, in which it is situated.

In a third class the dressings of the windows and doorways, and in a few even the string courses, are of marble; but the expense of the material has apparently induced the architects who have used it so to pare down the projections that, instead of being an advantage, the buildings in which it is employed are the least satisfactory of all. It may be added that a great deal that looks like marble at first sight is in reality merely paint, and by no means well done.

Taken by itself, the most magnificent of the palaces of Genoa is that formerly known as the Durazzo (Marcello), now the Royal Palace, with a façade in the Strada Balbi 300 ft. in length. Its style is similar to that of the Municipalità (Woodcut No. 71), but its height, about 75 ft., is hardly sufficient to its length, and would not be so if it could ever be seen in front; but, being, as usual, in a narrow street, this defect is not apparent. Its details are all designed on the largest scale, and the composition of the whole façade so bold, and, it must be added, so honest, that the effect is on the whole satisfactory.

The Ducal Palace was almost entirely rebuilt after the fire in the year 1778, and may be considered as more French than Italian in design. It is, however, a very elegant building, though most of its pillars are only painted marble. Its great hall is the finest room in the city.

One of Alessi's principal works is the Carrega Palace, one of the largest, and generally considered one of the handsomest in Genoa, the façade being a



72. Part of Façade of Carrega Palace, Genoa. From Gauthier.

square of about 93 ft. in width and height, but divided into seven stories externally, three being in the basement, two under the lower Order, one under the next, and the last between the consoles of the cornice. Only the architrave of the lower Order is left between the two, and the whole decoration is so evidently applied only to cover a space with which it has no constructive affinity, that the effect is very unsatisfactory.

The Sauli Palace, said to be by the same architect, is more pleasing, as it consists in the garden front of two well-defined stories ornamented with Orders, with arches between. On the lower storey are Doric pillars, and a rich frieze crowns the upper or Corinthian order. Towards the street there is considerable ability displayed in the way the central

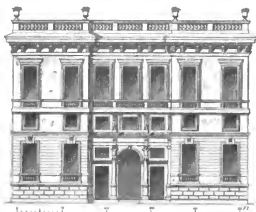
block is kept back, and the courtyard with its two wings thrown forward to the front. There is in fact more light and shade, and more variety of design, in this palace than in any in Genoa; and, if its details were a little more pure, it might challenge comparison in some respects with any in Italy. The same architect built the Lercari, Grimaldi, and Justiniani Palaces, and, in fact, happening to live at a moment of unwonted prosperity, and when a great extension of the city was taking place in the direction of the Strade Balbi and Nuova, he has left his mark more essentially on the place than any of his successors.

In addition to other peculiarities it may be mentioned that many of the greater palaces of the city are painted red; some green, some blue, and a great many yellow. All this produces in that climate a rich and sparkling effect, very taking at first sight; though it can hardly be denied that using coloured materials must be a more legitimate mode of producing an architectural effect than merely painting the mouldings on plaster. The fact is that the imposing appearance of these palaces is mainly due to the situations in which they are found. Nothing can well be more startling than to see six, eight, or ten great palaces, each standing separately, in a street barely 36 ft. in width, or to find in narrow lanes and small courts, great palatial masses six and seven stories in height, covered with ornament, and crowned by massive cornices, which you stand so close beneath that their effect is doubled by the angle under which they are seen.

By far the most beautiful feature of the greater palaces of Genoa is their courtyards, though these, architecturally, consist of nothing but ranges of arcades, resting on attenuated Doric pillars. These are generally of marble, sometimes grouped in pairs, and too frequently with a block of an entablature over each under the springing of the arch; but, notwithstanding these defects, a cloistered court is always and inevitably pleasing, even if not beautiful in detail, and, if combined with gardens and scenery beyond, which is generally the case in this city, the effect, as seen from the streets, is so poetic as to disarm criticism. All that dare to be said is that, beautiful as they are, with a little more taste and judgment they might have been ten times more so than they are now.

A more pleasing class of design than the greater buildings just described are the smaller palaces, such as the Balbi, Mari, and little Brignola, each with seven windows in front, three recessed in the centre, and two in each wing, in the two first named projecting in front of the centre, and carried only to the height of the principal storey, and, consequently, with a terrace roof; but, whether so used or not, the whole forms a most pleasing composition, peculiar to Genoa, and exhibiting her style of Architecture under its most pleasing aspect. But even these are not such as would escape criticism elsewhere, or would be tolerated if erected at the present day.

Taking it altogether, the study of the Palatial Architecture of Genoa is as instructive as that of any other city of Italy, though neither so beautiful nor so interesting as that of several others. The Genoese palaces are remarkable, first, for their size, and the largeness



73.

Little Brignola Palace, Genoa. From Gauthier.

of their parts — qualities which are immensely exaggerated by the narrowness of the streets and courts in which they are situated. They have also the immense advantage of standing free, each by itself, but still in close proximity to the next: thus the grouping produces an effect of magnificence in the whole which adds to the importance of each; and they are also, as a rule, free from any attempt to imitate or reproduce classical or any other models.

Against these must be placed the badness of the material, the coarseness and frequently the incongruity of the details, and that sometimes their architecture is either only painted in, or accentuated by paint, with a crudeness very closely approaching to vulgarity. If in addition to these defects the "Orders" had been allowed to govern the designs to the extent they were made to do so in other cities, the effect would have been most painful; but because they are palaces, and palaces only, and because their windows, their doors, and, above all, their cornices, are in their right places, and in due subordination to one another, all these defects are overlooked, and the impression the Genoese palaces generally produce is one of almost unmitigated admiration.

VI.—MANTUA.

The Palazzo del Té has acquired such celebrity that it is impossible to pass it over in a history of Architecture; but no building ever less merited its fame than it does. Originally it was intended as a stable, or rather as a sort of hunting-box outside the walls of Mantua; and Giulio Romano was employed, most appropriately, by the Marquis Frederigo Gonzaga, to paint portraits of his favourite horses on the walls of the only large apartment the building then possessed. The Marquis was, it seems, so pleased with the result of the experiment, that the palace was extended to what we now see it, and all the principal rooms adorned with frescoes by Giulio or his pupils. Though

these are as vulgar as most of the productions of this overrated artist, it may be that they entitle the building to some of the notoriety it has acquired; but its architecture certainly is such that, if found elsewhere, and under another name, no one would turn to look at it.

The building is nearly a square, externally 180 ft. by 186 ft., and 30 ft. in height to the top of the cornice. It is rusticated throughout in coarse stucco, and, besides this, its only ornament consists in a range of mean Doric pilasters, spread sparsely over the surface, and surmounted by a Doric entablature of very ordinary design. Between these pilasters are two ranges of windows, the lower ones of fair dimensions, and, above these, a range of square attic-looking openings. Throughout half the palace these last are mere shams, the principal rooms occupying the whole height of the building, where one range consequently only was required, and had it been adopted might have given a dignity to the design, in which it is now so sadly deficient.

Internally, the building surrounds a court of the same design, about 120 ft. square, from which a loggia leads, across a bridge, into a garden with architectural embellishments. This loggia is in fact the only architectural feature of any merit in the whole building. Its proportions are good, its ornaments well designed, and the colours judiciously applied, but it is very small, and only in stucco. The charm of the palace, in so far as Architecture is concerned, depends on the coffering and colouring of the ceilings, which display an amount of design, and of fancy combined with elegance, seldom seen elsewhere, and consequently worthy of all praise, but they will not suffice to redeem the building from the reproach of being, externally at least, of the tamest commonplace as an architectural design. If we assume that painting is the proper mode of ornamenting interiors, it is the painter, not the architect, that must decide how far this is or is not a successful specimen of the art. But this does not affect the criticism that may be applied to the exterior, which is only coarsely yellow-washed, and is not entitled to the admiration generally bestowed upon it by those who admire the works of the painter in the halls it encloses.

If Giulio Romano was forced to tame his fancies in the design of this structure, he gave full rein to them in the design of the façade of the Palazzo Colloredo in this city, which he adorned with gigantic caryatides, of the vulgarest and most fantastic design conceivable. Nothing that Michael Angelo ever did was so exaggerated as this. With all his faults, he never employed great grotesque figures in stucco as a means of producing an effect appropriate to a nobleman's palace in the street of a city.

When such things were done so early in the age of the Renaissance, one cannot but feel grateful to Palladio, and others of his school, for bringing back Art within the bounds of moderation; for, however tame some of their designs may be, the worst of them is better than such a nightmare of vulgarity as we find in this and some other of the designs of the early part of the sixteenth century.

¹ Giulio Romano died in 1546.

VII.—MILAN.

During the whole of the Renaissance period Milan continued to be one of the most important and richest cities of Northern Italy; perhaps even relatively more so than during the Mediæval period, during which, however, she was able to erect the finest Gothic church in Italy. Yet, strange to say, there is scarcely any city in that country so deficient in examples of architectural magnificence as Milan continued to be during the whole of this period. She produced no architect, gave fame or name to none, and does not possess any specimens of Renaissance Art on which we dwell with pleasure, or love to quote, as calling up reminiscences of beauty; the one obvious exception to this being the great court of the Ospedale Grande, which is one of the most remarkable buildings of its class of that, or indeed of any age.



74.

Great Court of the Hospital at Milan. From a Photograph.

It was commenced in the year 1456, by Francesco Sforza, and his wife Bianca, nearly on the scale on which we now see it completed, but they only lived to finish the northern wing, consisting of four courts comprised in a square, of about 340 ft. each way. Considering the age at which it was erected, the design is much more Mediæval than might be expected, especially from a Florentine architect like Filarete, who was its author. All the external windows are pointed, and adorned with quasi-Gothic mouldings, and internally the arcades that

surround the courts partake much more of Mediæval than they do of Renaissance design. They are so built up now, and so disfigured by additions, that it is difficult to judge of their effect, but enough can still be made out to show that, when new, these courts must have been as appropriate to their purposes as they were effective in an architectural point of view.

To the northern face of this block Bramante added a portico or corridor of the Ionic order, bearing arches, and he may either have added a portion of the upper corridor, or at least left the design for it; but there the matter rested till the year 1621, when, a large sum of money having been left to the charity by a Dr. Carcano, the architect Richini was employed to erect the central court. With a degree of taste and modesty as commendable as it is unusual, he resolved to complete Bramante's design round the three other sides, and this is done so literally that, except the window-dressings and some other details, in which we detect the seventeenth century, the whole design of the court may be ascribed to Bramante. It is by far the finest thing of its kind in Italy. In Spain there are some that equal, if they do not surpass it; but, except the court of the Venetian Palace at Rome, and one or two other less important examples, there is really nothing to compare with it in Italy.

The dimensions of this court are 243 ft. by 220, from one face of the colonnade to the other, and it possesses nineteen arches on the one side and twenty-one on the other; these dimensions being almost greater than the design can well sustain. Its great beauty, however, consists in the proportion of the two superimposed colonnades one to another, and of all the parts to the work they have to perform. The effect is due, even more than this, to the amount and exquisite beauty of the details with which the whole is covered, and its great crowning cornice is perhaps, for the situation it occupies, the most successful instance of design of this age which Italy possesses. In a smaller court such a cornice would be too deep and too bold, but here its proportions are as near perfection as can well be conceived, and all its details form a triumph of the art of design.

The external façade towards the street was added at the same time, and, by a singularity found nowhere else, the pointed arches of Filareto's design were repeated here, with only such modifications of detail as it is difficult to detect, but, strange to say, they are encased in a design which bespeaks most unmistakably the date of the seventeenth century, to which it belongs. The effect of this is not so unpleasing as might be expected from this incongruity of parts, though it might have been better had they been brought a little more into harmony.

The third portion of the Hospital has been completed in more modern times, and in a style so utterly tame and tasteless that it could only be found in Milan of all Italian cities.

Among the palaces of this city, the most original, if not the most beautiful, of the age to which it belongs, is the Casa Rotta,¹ opposite

¹ Said to be designed by Leone Leoni, otherwise known as the Cavaliere Artino.

the Scala, and now used as the Custom-house. The principal façade is divided into three well-defined stories, and ornamented with pilasters, and a profusion of decoration, not certainly in the best taste, but never offensively vulgar and unconstructional. Its peculiarity is that it looks more like our Elizabethan, or as if erected in what might be called the Heidelberg style, it has so little affinity with the principal contemporary works in Italian cities. The courtyard is equally overdone with ornament, but the whole is singularly picturesque, and so free from errors of design, that we can forgive a little tendency towards the grotesque in a country where tameness and classicity are the besetting sins of the designers.

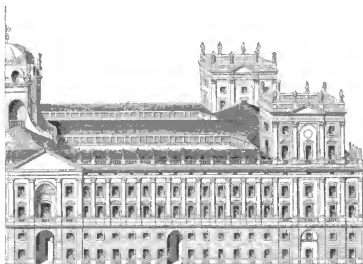
The Brera possesses some good points of design, but is indebted to its size more than to any other cause for its effect; and the Broletto, or Palazzo della Città, exhibits some pleasing bits of detail. It is an early specimen of the Renaissance style, but is too small, and too confined in situation, to display much architectural grandeur, so that all it attains to is a certain amount of picturesqueness, which is seldom wanting in buildings of its age. The Royal and Archbishop's Palaces, which occupy the whole of the south side of the piazza in which the Cathedral stands, and the new buildings which form its eastern side, are all large enough, and with a sufficiency of ornament, to make them important in an architectural point of view, but are of such commonplace design as to be unworthy of notice. In almost any other city of Italy they would have arrested attention, but Milan was either too German, or at all events too inartistic, to be able to avail herself of her opportunities.

VIII.—TURIN, NAPLES, &c.

Turin possesses little that need arrest the student of Architecture as a fine art. One of her earliest architects was Guarini,¹ a man who out-Heroded Borromini in the theatrical style of his art, and always sought to produce effects which might startle and sometimes please on the stage, but which are absolutely destructive when applied to so permanent an art as that of Architecture. He was succeeded by Ivrea and Vanvitelli, men with as little feeling for Art as can well be imagined, but whose good fortune it was to live in an age when the art was at its lowest ebb—so low that their productions were universally admired by their contemporaries, and they were consequently everywhere employed.

The Caserta Palace at Naples was erected by the latter, who had there such an opportunity as had not fallen to any architect in Italy of his day, it being the largest and most nobly decorated palace executed in that country since the Renaissance. The building (Woodcut No. 75) was commenced in 1752, and is an immense rectangle, 766 ft. long by 500 ft. wide, and 125 ft. high from the ground to the top of the balustrade. At each angle there is a square pavilion, and a high

¹ Born 1624; died 1683.



75.

Portion of the Façade of the Palace of the Caserta at Naples.

dome crowns the centre, but so placed as not to be seen externally, except at a distance. The design is perfectly uniform throughout, and consists of a rusticated basement, including two stories of windows and a sunk storey. Above this is an interminable range of Ionic pilasters, with two stories of large windows between each pair, and a smaller range in the frieze. The façades are only broken by very slight projections in the centre and at the ends, which, however, are hardly sufficient to destroy the painful monotony of the whole design. The best part of the arrangement is that the centre is divided into four equal courts by two ranges of buildings containing the state apartments, which are thus arranged not only with great convenience, but with very considerable architectural effect, internally; and a little more art would have made the courts themselves pleasing and effective. As a whole it is perhaps better than the Esenrial, but otherwise it is as tame and uninteresting a design as any city in Europe can well show, and a painful illustration of how the art had fallen in Italy at the time of its erection.

IX.—CONCLUSION.

The long cessation of intellectual activity which has been the sad fate of the country that first spread the light of art and literature over the continent of Europe, has prevented the Italians from reaching that second stage of the Renaissance which may be conveniently distinguished as the Revival. With the rarest possible exceptions, they have never added porticoes, borrowed literally from ancient temples, to their houses or public buildings. Whatever the faults of their style

may have been, they never committed the absurdity of cutting a slice off one old building and planting it in front of a new one, wholly irrespective of either its use or appropriateness. Though they used the Orders everywhere, they were the Italian, not the Latin Orders; and, though even these seldom exactly expressed the construction, they were always interwoven with it, and pretended, at least, to represent it. They were, consequently, in Italy, far less offensive than the great unmeaning porticoes with which we in England seek to adorn our churches, our palaces, and our civil buildings. Neither have the Italians ever attempted such a Revival as the Madeleine or the Walhalla, and, generally speaking, the revival of Greek Art, which at one time was so fashionable with us and the Germans, is utterly unknown to them. Whether freed Italy is to pass through this stage of Art, yet remains to be seen. Let us hope she will benefit by the experience of the other countries of Europe, and that she may also escape the Gothic mania, which is proving so fatal to real progress in Art. This, indeed, she may probably do, as she has no Mediæval style of her own of which she has any great reason to be proud; unless, indeed, it should happen, by one of those caprices which are only too common in Art when once it swerves from the true path, into mere copying, that the Italians should take it into their heads to borrow a French or English style, in return for the strange specimens of bad Art we are now importing so freely from Italy.

If the Italians remain true to themselves, no nation in Europe has so fine a chance of attaining perfection in Architectural Art. Though the "Orders" may not be applicable to all purposes of civil or ecclesiastical buildings, they are at least the native products of the Italian soil; they are suited to the climate, and are hallowed by the associations of the land, but they are not the only elements of the art to which they belong. The misfortune of Italian Architecture was that its professors in the sixteenth century studied the remains of the temples—the domestic and civil buildings had nearly all disappeared—till they became pedants in their art, and enthusiastic for the doctrines of Vitruvius, whose want of knowledge and of true feeling for his art has rendered his influence so disastrous wherever it has been felt. The consequence was, that they not only prescribed the use of columns for all places and purposes, but fixed their proportions and the exact form of their details by canons which no one has since dared to dispute. All real invention was thus put a stop to, and originality could only be attained in the design of window-frames or panellings, and minor ornaments, which were turned over to the tender mercies of men who, freed from the wholesome check of constructive necessity, sought to produce effects by the most uncontrolled wildness of decorative absurdity.

Italy has only to go back to the inspirations which characterize the end of the fifteenth and the dawn of the sixteenth century, to base upon them a style which will be as beautiful as it would be appropriate to her wants and her climate. If she will only attempt to revive the traditions of the great age which is hallowed by the

memories of Leonardo da Vinci and Raphael, of Bramante, Sangallo, and even of Michael Angelo, she cannot go wrong. These men erred occasionally from inexperience, and because the system under which the art was conducted in their days was such as to render success impossible; but their aspirations were right, and there was an impress of nobleness on their works which has not since been surpassed.

Since their time the history of Italian Art may be summed up in a few words. During the fifteenth century it was original, appropriate, and grand; during the sixteenth it became correct and elegant, though too often also tinctured with pedantry; and in the seventeenth it broke out into caprice and affectation, till it became as bizarre as it was tasteless. During the eighteenth it sank down to a uniform level of timid mediocrity, as devoid of life as it is of art. In the present century it has been, if anything, French. But now that the country is again a nation, and has a future before it, it remains to be seen what her Art will become. If the Italians are capable of freedom, and of national greatness, their Architecture cannot fail to be a reflex of whatever is great or good in their character or institutions.

BOOK II.—SPAIN.

Ferdinand and Isabella	1474	Charles II.	1665
Fall of Granada	1492	Philip V... .. .	1700
Charles I.	1516	Ferdinand VI.	1746
Philip II.	1556	Charles III.	1759
Philip III.	1598	Charles IV.	1788
Philip IV.	1621	Joseph Napoleon	1808

THE difficulties which are met at every turn, when attempting to acquire correct information with regard to the Mediæval antiquities of Spain, are increased tenfold when we come to examine the history of the Renaissance styles. The truth seems to be that up to a very recent period all architectural travellers in Spain were so fascinated by the elegance and picturesqueness of the Moorish remains of Granada and Seville, or Cordova, that they could not be persuaded to look beyond; and book after book, frequently most superbly illustrated, was published, not only in English and French, but even in Spanish, to illustrate these fascinating productions. By degrees the subject has been worn threadbare; and it has also been discovered that at Cairo, and throughout Anatolia, Persia, and India, there are examples in the same style far purer and far more worthy of study than the plaster glories of the Spanish Moors. The result of this has been that recently some attention has been paid—though only in a careless, sketchy way—to the Mediæval antiquities of the country; and with the materials now available a tolerably correct judgment may be formed, not only as to the extent, but as to the principal characteristics of the Gothic buildings in the Peninsula; it will however be many years before this mine is sufficiently worked out to induce explorers to turn their attention to the very unfashionable styles of the Renaissance. No traveller has yet visited Spain who had sufficient knowledge of Architecture to enable him to discriminate between what was good and what bad, or who had sufficiently enlarged views on the subject to enable him to appreciate the relative value of the different styles of Art now found in the country. We have books in abundance on the glories of the Alhambra and of Moorish Art generally—we have latterly had some fine bursts of enthusiasm about the Cid, and Gothic Art in Spain—but for the Renaissance we are left to the prosy twaddle of Ponz or the dry text of Caen Bermudez, which, though eminently useful to those who have the buildings before their eyes, are worthless, from their deficiency in illustrations, for the purposes of stay-at-home explorers. Perhaps it may be that there are good reasons for this indifference. It may be that

the Spaniards themselves are as inartistic as they are deficient in some more important qualities. The Moors, who occupied the south, were, we know, eminently artistic in all they did; so were some of the northern nations, who penetrated across the Pyrenees in the early centuries of the Christian era, and occupied the Asturias and Old Castile; but as the one race was expelled and the other absorbed, the Iberian element again came to the surface, and, as it predominated, Art seems to have died out under the depressing influences of exclusiveness and bigotry. Were the Iberians Semitic?—or did they belong to some even harder or less artistic race?

Whatever the cause, the result is nearly certain that, in so far as the Renaissance is concerned, it is only the first burst of it that is really worthy of much attention. The first symptoms of the new style displayed themselves during that period of exultation and of pride that followed on the fall of Granada, and the union of all Spain under the glorious tutelage of Ferdinand and Isabella. It continued to flourish till nearly the death of Charles V., a period during which Spain, from her discovery of the New World, and the position of her monarchs as the greatest sovereigns of Europe, combined with the energy of the great men who then illustrated her councils, stood forward practically as the leading nation of Europe. The enthusiasm and exultation of the first half of the sixteenth century are well expressed in the buildings of that age, but they perished under the iron rule of Philip II. During the reign of this monarch nothing was thought of by him but the extension of his dominions, by whatever means this might be attained. The priesthood were bent on the acquisition of that power which the intolerance of the Spanish character and the dread of innovation enabled them to accumulate, and the laity were engrossed in the pursuit of those riches which the discovery of the New World had opened up to them. Art was not likely to flourish in a nation so occupied; and the cold academical productions of Herrera are only too true a reflection of the small fraction of the national mind that could be spared for such purposes. What Palladio and Vignola did for Italian Art, Herrera¹ did for Spanish, but without the gentleness and elegance which characterised the works of these two architects. However grand or rich his works may be, there is no human interest in them; and it is hardly to be wondered at that tourists look with indifference on their cold formality. The Spaniards themselves soon tired of it, and in the seventeenth century broke out into a wildness of style which out-Herods the absurdities of Borromini, or the most meretricious examples of the Louis Quatorze style. The forms then used were such as are now relegated to the carver and gilder, and no single instance of anything like grandeur of conception can be quoted.

The Spaniards distinguish these three epochs by calling the first the *Plateresco*, or silversmith's style—a term which perfectly expresses the elegant exuberance of their first efforts, extending from the fall of

¹ Died 1597.

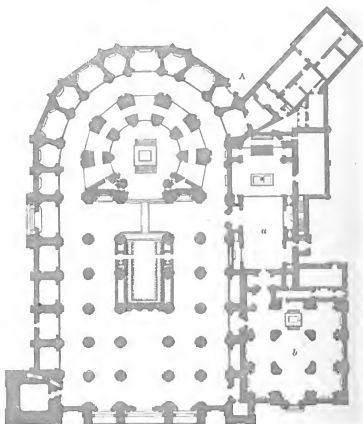
Granada nearly to the abdication of Charles V. in 1555. The second, which they call the *Græco-Romano*—heavy and pedantic, like its name—characterised the reign of Philip II. and his two successors, lasting consequently down to the middle of the seventeenth century. The third, which the Spaniards distinguish by the unpronounceable cognomen of *Churrigueresque*, from the name of the architect who was the chief author of the monstrosities of his age, flourished for nearly a century, or say from about 1650 to 1750. During the last hundred years they have done nothing worthy of being quoted; and it still remains to be seen whether the newly-revived spirit of the nation will be sufficiently lasting to lead to the revival of Art. Their resumption of a political position among the great nations of Europe has been so unexpected that it would be unphilosophical to assume that they may not achieve an artistic success as great as their political. It may be so; but the previous history of the Iberian mind by no means encourages sanguine views on this subject, and, it may be added, they have as yet shown no tendency towards development in that direction.

ECCLESIASTICAL ARCHITECTURE.

All the buildings of Ferdinand and Isabella are, so far as we know, in the late Gothic style. San Juan de los Reyes at Toledo is as Gothic as Henry VII.'s Chapel at Westminster; so is the Capella in which they lie entombed at Granada, though the sarcophagi on which their effigies repose are of an advanced Cinque-cento style; but these were made at Genoa, and Italy was then some fifty years in advance of Spain. Even in the time of Charles V. we find a Gothic feeling prevailing, in church-building at least, to an extent that is rather startling.

The Cathedral at Salamanca, commenced in 1513, is purely Gothic in style, though it betrays the Transition in our knowing the name of the architect who designed it, Gil de Hontanon, and that the work was continued by his son Rodrigo, after his death. We know, too, that their work there was so much admired that they were selected as the architects of the Cathedral of Segovia, one of the largest and finest in all Spain; which, though commenced in 1525, and continued by Gil till his death, in 1577, is so Gothic in all the parts that he superintended, that it scarcely can be called a Renaissance work in any respect.

Almost the first work in which Renaissance feeling distinctly appears is the Cathedral at Granada, commenced in 1529, from designs by Diego de Siloe, and yet even this can hardly be called more Classical than the contemporary church of St. Eustache at Paris. Its plan is at first sight purely Gothic, but, on closer examination, it contains arrangements which are not only novelties but improvements upon anything done before; and such, that, if they had been fairly worked out, would have produced a church better fitted for the dignified performance of Roman Catholic rites than anything which we have yet seen. The centre aisle, which is 40 feet wide, instead of terminating



76.

Plan of the Cathedral at Granada. Scale 100 feet to 1 inch.
a. Chapel of Ferdinand and Isabella. b. Sagrario.

in a mere apse of the same width, expands into a dome 70 feet in diameter, beneath the centre of which, in a flood of light, stands the high altar. The supports of this dome are so numerous and so distributed that it might have been constructed 170 feet in diameter as easily, and of any height. No modern dome is in fact so constructively arranged; and as it was not proposed that there should be any thoroughfare under it, or that it should lead to anything beyond, the number of points of support which are introduced, and their being somewhat crowded, is a beauty rather than a defect. It opens by an arch, said to be 190 feet¹ high, into the body of the church; and were it not that the centre aisle, as in all Spanish cathedrals, is blocked up by the choir, the vista from the western entrance would be unrivalled. The aisles on each side of the central one lead to two subordinate altars, which close their vista

¹ Probably if the odd 90 were deducted it would be nearer the truth.

most artistically and appropriately. The outer aisle forms an ambulatory round the whole building, and communicates with all the chapels which surround it. The cathedral is 400 feet long by 230 wide, and therefore of the first class, so far as size is concerned; and it has, besides, the splendid chapel in which the Catholic Kings lie buried, and a Sagrario, or parish church, 100 feet square, on the right of the entrance.

Looking at its plan only, this is certainly one of the finest churches in Europe. It would be difficult to point out any other, in which the central aisle leads up to the dome, so well proportioned to its dimensions, and to the dignity of the high altar which stands under it, or one where the side aisles have a purpose and a meaning so perfectly appropriate to the situation, and where the centre aisle has also its function so perfectly marked out and so well understood. All this being so, it is puzzling to know how it has been so neglected. Is it that the neighbouring Alhambra eclipses its glories altogether?—or is it that its details are so bad or so badly drawn as to mar the effect of the very beautiful plan and arrangements of the whole? This silence can hardly be accounted for, but no description of it appears in any modern book, and there is no drawing, either of the exterior or interior, by which we can really judge of its effect. Such drawings as we do possess would lead us to suppose that the external form of the dome was not pleasing. The façade is unfinished, but any photographs that can be procured give a pleasing impression of the elegance and purity of its design. The Puerta del Perdon (marked A on the Plan), leading into the circular part of the choir, is certainly as rich a specimen of Renaissance Art as is to be found anywhere. Its taste is questionable, as the Roman Orders are used merely as ornaments, without reference to constructive propriety; but the whole is so rich, there is such an exuberance of ornament, and such a play of fancy, that in any other position it could not be passed over without remark. The interior of the church must have beauties which an architect would discover in spite of the whitewash which covers it, and in spite, too, of the gaudy colouring of its Moorish rival on the neighbouring hill, which has so eclipsed it hitherto in the eyes of tourists; but if they exist they have not been remarked by any of those who have written about Granada up to the present time.

The Cathedral of Jaen, like that of Granada, is said to have been built on the site of the great mosque of the city. It was commenced in 1525 by an architect called Valdelvira, and is interesting from its plan being arranged in a manner peculiar to Spanish cathedrals, but not found in any earlier example, though frequently afterwards. It is a



77. Capital of Cathedral at Jaen.

parallelogram 300 ft. long by 175 in width, arranged in three aisles, with a series of chapels beyond the outer one. Such an arrangement has neither the poetry nor grace of that of Granada, but it may be better suited to the incipient Classical style which was then being introduced. Internally, its architecture is of the same pattern as that of Granada. The piers (Woodcut No. 77) consist of four half-columns of the Corinthian Order, attached to the four sides of a square pier, and over this a block of the entablature, with its frieze, cornice, &c., spreading over like a great mushroom, and inartistically cutting off the pier-arches from their supports. If this entablature had been omitted, and the arches of the great vaults sprung direct from the capitals of the pillars, their effect, from their size and richness, would have been extremely grand. In the centro there is a great dome which relieves their monotony, so that altogether it required very little to make the whole pleasing and satisfactory; but white, or rather yellow, wash seems to have obliterated what beauties it possessed, and to have increased the repugnance of tourists to study its peculiarities.

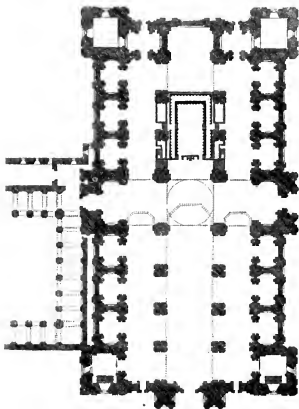


78. Puerta de las Cadenas, Cathedral of Malaga. From Parcerisa, *'Recuerdos,'*¹ &c.

¹ Parcerisa's *'Recuerdos y Bellezas de España,'* now in course of publication at Madrid, is one of the best and most complete works of

its class, but possesses neither plans nor architectural details of any sort.

As the Church of Malaga is one of those which artists occasionally sketch, we are able to form some idea of the effect of the exterior of these half-Gothic, half-Classic buildings of this age. That at Segovia is very similar, though earlier in style. Their principal merit is that they are devoid of affectation; there are no pilasters or useless columns; but their outline wants variety, and the windows are generally so small that they have a gloomy flatness which is seldom relieved by buttresses or pinnacles to the extent it must have been in an earlier age. Their façades were always intended to be relieved by steeples, generally in pairs; but, as in these two instances, seldom finished; seldom, indeed, is even one quite completed, as it is, however, at Malaga (Woodcut No. 78). The transeptal entrances are frequently more fortunate than those of the principal façade, partly because the building was commenced generally from the choir-end, and partly because, being less ambitious, they were more manageable. In this church, that shown in the woodcut, and called the Puerta de las Cadenas, though unfinished, is a fair specimen of the style; and the whole flank of the building is



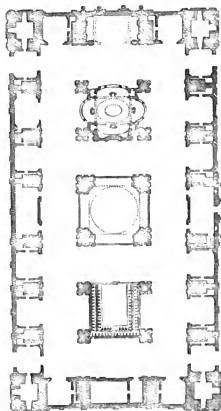
19. Plan of the Cathedral at Valladolid. From Ponz, 'Viage.' Scale 100 feet to 1 inch.

as agreeably composed as any of its age. If it misses some of the beauties of Gothic, it has at least none of the falsities of the pseudo-Classic; and makes us regret that architects, instead of following out what is here sketched, took to copying what was irrelevant and useless.

The Cathedral of Valladolid is an extension of that of Jaen in plan, and thoroughly Spanish in all its arrangements; but having been commenced in the reign of Philip II., from designs by Giovanni d' Herrera, it is strictly Classical in all its details. Its dimensions are very con-

siderable, being 400 ft. long by 205 in width;¹ and it was to have had a tower 240 ft. high at each of its four angles. The interior is severe and simple; and, as far as can be judged from the materials available, is one of the most effective, as it is one of the largest churches of its age; simple in arrangement, grand in proportion, and ornamented with taste, in spite of the modelling of Churriguerra at a later age.

The second Cathedral of Zaragoza, called *Del Pilar*, from possessing the identical pillar on which the Virgin descended from heaven, is even larger than that last described, being 435 ft. long by 220 in width, so that it covers nearly 100,000 ft. It was, however, commenced at a bad age (1677), by Francisco Herrera, continued at various intervals by different architects, and even now can hardly be said to be complete. Although pos-



20. Plan of the Cathedral del Pilar at Zaragoza. From Ponz.
Scale 100 feet to 1 inch.

sessing elements of grandeur about it, the fatal effects of bad taste are everywhere so apparent that its design is very unworthy of its dimensions and of the position it holds as the largest and most celebrated modern church in Spain. Externally, the principal defect is that it has no dome or central point of sufficient size to relieve

¹ Its superficial dimensions are consequently very nearly identical with those of our St. Paul's.

the squareness and flatness of the design. The central dome being really the one great invention of the Renaissance architects, and the one point which fairly challenges comparison with anything in Mediæval Art, it is the feature which gives such dignity externally to St. Peter's, St. Paul's, and other churches of the same class. It is sadly missed here, and its place would not have been supplied by the four towers which were intended to have adorned its angles. One only of these has been carried as high as the third storey; the rest are only of the height of the roof, and do not suffice to relieve the flatness which is inherent in the few openings and unbroken line of walls so common in Spanish buildings. In this respect the Gothic Seo—as the other Cathedral of Zaragoza is called—is more fortunate. It has one complete tower of Cinque-cento design (Woodcut No. 82), and which may be con-



81.

View of the Cathedral del Pilar at Zaragoza. From Parcerisa.

sidered as a typical specimen of the campaniles of Spain of this age. Though not perfect, either in outline or in detail, it avoids many of the defects which architects too frequently fall into in designing buildings with great vertical dimensions in a style where horizontal features so essentially prevail. The rusticated basement is solid and well proportioned; the next storey also is without openings and without an Order, properly so called; and the two others gradually increase in lightness as they ascend. It is very doubtful whether the termination we now see is that originally designed, but the effect is not ungraceful, and avoids the common defect of placing a dome on so tall a building, where it always appears low and squat, or of adding a spire whose lines can hardly be made to accord with the forms of Classical Art. This tower was commenced in the year 1685, from the designs of a

Roman architect, J. B. Contini, who was also the architect of the Hospital of Montserrat. Its height is about 300 ft. English.



2. Tower of the Seo, Zaragoza. From *Parcerias*.

In the church of San Andrea at Madrid is a chapel to San Isidro, a saint famous here, though scarcely known elsewhere. It was erected by Philip IV. and Charles II. at the very end of the seventeenth century, and is a very fair specimen of the style of ornamentation in the churches of this epoch. Rich and gorgeous they certainly are, and generally also freer from faults of exaggeration than their Italian congeners, but they are not satisfactory as a whole, and though grand, even it may be said palatial, they seldom produce the effect of solemnity so desirable in a church, though their arrangements are never such as to admit of their being taken for anything else.

The principal defect is that, in the first place, they are over-ornamented, every part being covered with mouldings or panellings, and these generally accented with colour. But a worse defect than this is that the ornaments generally are in very bad taste. The fatal facility afforded by plaster allowing the artist to run wild in his decorations, and having no restraint of construction when seized

with a hankering after novelty, it requires a degree of restraint and self-control which few architects can exercise, not to indulge in too exuberant decoration.

Perhaps the most redeeming features of Spanish churches are the steeples with which they are almost invariably adorned. In Italy there is scarcely an instance in the Renaissance times where the campanile is successfully wedded to the body of the building. In

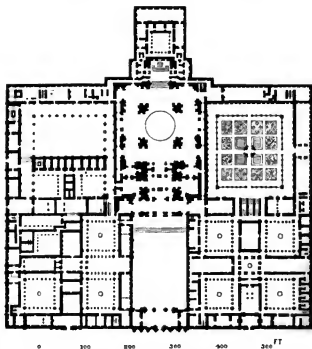
most instances they are entirely detached, or, when in juxtaposition, their plainness and great height are rather destructive than otherwise to the effect of the building. In France there is scarcely a single example of a successful Renaissance steeple. There are western towers at St. Sulpice and St. Vincent de Paul, but even these can hardly be called remarkable, and they are exceptional, and not such features as will bear examination by themselves. The Spaniards, on the other hand, never seem to have thought a design complete without two or four steeples being attached to it, and these very often were of great beauty of design. The example at Malaga, quoted above (Woodcut No. 78), and that of the Seo at Zaragoza (Woodcut No. 82), are fair average specimens of the class. They are found attached to every church and every convent in Spain, and not only give a peculiar local character to the landscape, but produce in fact by far the most pleasing effects of Architectural Art in that country.

Perhaps the most pleasing group of steeples to be found in Spain is that which adorns the Cathedral of Santiago. The façade of the church, it is true, was built as late as 1738, and will not therefore bear examination; but its general outline is so picturesque, it fits so pleasingly with the old cloister, which is two centuries earlier, and these with the steeples make up a group of buildings so picturesque in outline and so gorgeous in detail, that he must indeed be severe in taste who can resist the fascination of such an assemblage of buildings. There are other specimens at Xeres, at Carmona, and at other places, where their tall spires give a character to the outline of the towns as beautiful as it is truly local and Spanish.

It is of course true that during the seventeenth and eighteenth centuries the Spanish architects did build steeples which were as frightful as can well be conceived; but these were certainly the exception, and then it was only in the depth of their architectural Dark Ages. As a general rule, the steeple is the feature of their churches which they managed with the most success, and which gives the greatest amount of character, not only to their churches but to their towns, from whatever point of view we look at them.

THE ESCURIAL.

What Versailles is to France and to the history of French Renaissance Architecture, the Escorial is to Spain and to its architectural history. They are both of them the greatest and most deliberate efforts of the national will in this direction, and the best exponents of the taste of the day in which they were erected. The Spanish example, however, is, as nearly as may be, a century older than its rival, having been commenced in 1563, it is said in consequence of a vow made by Philip II. at the battle of St. Quentin, and, like Versailles, it had two architects, the original designs having been furnished by Gianbattista, of Toledo, but the actual execution being the work of the celebrated Herrera, who succeeded on the death of the original architect, which took place in 1567.



93.

Plan of the Escorial. From Ximenes.¹

It is not possible to establish any very exact parallel between the two buildings which were erected for such dissimilar purposes. Versailles was designed as the residence of a gay and brilliant court, and a theatrical chapel in the back yard was added only as the pendent to the mere important Theatre, which was an indispensable adjunct to such a palace. The Escorial was the splendid abode of a great but gloomy despotism, where the church was the principal and grandest feature of the design, and the abodes of priests occupied the places which at Versailles were appropriated to courtiers.

Architecturally, too, it must be observed that the design of Versailles is wholly external; all its bravery is on its face, and looks outwards; while whatever there is of grandeur or elegance in the Spanish example must be looked for in the courtyards, or in the church which forms the centre of the whole composition. Externally the building is little better than a great granite barrack, and, though the façade does make some pretension to architectural design, it is of the most commonplace character, excusable only on the plea that it is a screen—a shell, in fact—to contain a noble kernel inside.

¹ No plan of the building has been yet published which can be depended on either for correctness of detail or dimensions, and as

a general rule the views are not much more trustworthy.

Every modern author in describing this building begins by asserting that the *motivo* of the design was to represent the gridiron on which St. Lawrence suffered martyrdom. Though the conceit is clever, it hardly seems tenable, inasmuch as any one who looks at the pictures of the martyrdom of the saint which are contemporary with the building of the palace, will see that their conception of the instrument of torture used for the occasion was an iron bedstead, very appropriate for the purpose, but as unlike our notion of a gridiron as it is unlike the plan of the Escorial. The whole story seems a mistaken invention of a later date.

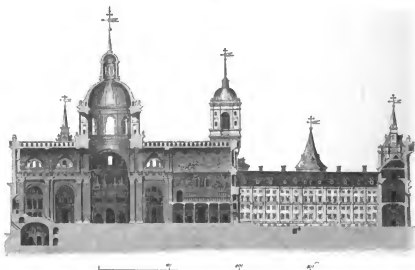


84

Bird's-eye View of the Escorial. From a Drawing by D. Roberts, R.A.

Be this as it may, the general conception of the building is singularly grand and appropriate. The great façade with its three well-proportioned entrances, and its two flanking towers, is just sufficiently broken for effect, and is well proportioned both as to height and length; for though only one half the length of the garden façade at Versailles, it is not only higher, but very much more broken in outline.

Nothing can be grander than the arrangement of the central entrance, leading to a well-proportioned atrium in front of the great basilica, and having on the right hand the Colegio, on the left the monastery,



85. Section through the Church and Atrium of the Escorial. From Ximenes.

beyond which is the palace, which culminates in the state apartments, further on and immediately behind the high altar. Nor can anything be much better than the four smaller courts of the college, leading up the grandest court of the whole building, and on the other side the gradual increase of magnificence to the great court of the palace, and thence to the state apartments. But the crowning beauty of the whole arrangement is, that through all and above all rises the church with its dome and two western towers, giving dignity and point to the whole, and supplying that feature the want of which is so painfully felt at Versailles and the Tuileries. In the entire design of the Escorial it cannot be said that there is one single feature which is in the wrong place, or which could be omitted without loss to the general effect, or one which is not perfectly proportioned not only to its place, but also to the relative influence it was intended it should have on the whole design. Yet with all this it must be confessed that the Escorial is a failure in an architectural sense; a great conception has, in fact, been utterly destroyed by the way in which it has been carried out.

The façade, which extends to 680 ft. in length, is ruined by the number of small windows which crowd it everywhere. Being really five stories in height throughout, and seven, with an attic, in the centre, the first five are comprehended in the height of the Doric Order of the central portico, though there are only three between the pillars, but one is added in the basement on either side of the central block, and another takes in the height of the entablature of the Order; the remaining two are comprised in an attic. All this is bad enough, but it is made worse by the small size of these windows and the want of appropriate dressings, which gives an air of meanness

to the whole which the size of the façade rather adds to than diminishes. If all these small windows were necessary for the internal arrangements, as no doubt they were, the introduction of the Order at all was an unpardonable mistake, and two bold masses, like towers, flanking the entrance, would have given it all the importance required, without incongruity. The angle towers, though well placed and well proportioned, require some further ornament, especially in the upper stories, to give them dignity; they are designed merely like private dwelling-houses, three windows wide and nine stories high. The flanks of the building are nothing more than plain granite walls, pierced with five stories of unornamented square windows, with as little design and as little ornament as one generally finds in a Manchester cotton-mill. Where this extends over 520 ft. the effect is most unpleasing, especially as by a little grouping of the windows, and a few slight projections, it might easily have been avoided.

The atrium in front of the church, which, from the plan, we would expect to be the richest and most effective feature in the design, is ruined from the same cause. On the right and left hand there is nothing but a plain factory-like building, five stories in height, with the further singular disadvantage that, as the ground slopes upwards towards the entrance of the church, the string courses and cornice follow the incline; but the window-heads are horizontal, and each pair rises a little over the next, so as to follow the rake of the string. In no modern building is there so clumsy and so disagreeable a makeshift as this. The idea of the architect evidently was, that by the plainness of the flanks he could enhance the richness of the porch of the church—a clumsy theatrical trick, which was sure to fail. It is as if a lady were to put a blanket over her shoulders instead of a shawl in order to enhance the richness of her dress. If the sides of this court had been arcaded, like the great cloister, and had there been an appropriate entrance on either hand to the College and to the Palace, it would have been a restoration of the old and beautiful feature of an atrium which modern churches lack most sadly. As it is, the architect has actually been at the pains to provide an underground communication between the two sides of the building, in order not to break the uniform ugliness of the elevation.

The seven small courts, each about 60 ft. square, are not remarkable as architectural designs. They have each three tiers of arcades, one over the other, very plain and very unobjectionable. The Palace Court has on three sides an arcade, with a Doric Order in very good proportion, above which is a gallery with square-headed windows in panels. The most magnificent feature in the whole, however, is the Court of the College, about 140 ft. square, with an arcaded cloister, in two stories, running round its four sides. There is a garden in the centre, with a fountain; and the whole is so well proportioned, and of such dimensions, that there is scarcely any cortile in an Italian palace to compare with this. Its one defect, and it applies to all the courts here, is that they are approached only through small doorways; and these not in the centre of the sides, but either in the angles of the courts

or unsymmetrically on some part of the sides; consequently the courts do not produce any grand united effect, which they might easily have been made to do. Each is independent of the other, and no vista or general conception of the whole can be anywhere obtained.

The great feature of the group, however, is the Church; and whether we consider it with reference to its dimensions or to the grandeur of its design, it deserves to rank as one of the great Renaissance churches of Europe.

Its dimensions, as far as they can be made out from such plans as are available, are 340 ft. east and west, by 200 north and south, and it covers about 70,000 square feet. The dome is 60 ft. in diameter internally, or less than that of the Pantheon at Paris, but is single, and of much simpler construction. Externally, the façade is not very remarkable, but there is nothing to offend good taste. It expresses perfectly the internal arrangements, and, with its two flanking towers, is quite as imposing as the dimensions of the atrium require or would admit of.

Internally, there is in front a gallery extending across the church, similar to that at St. Peter's at Rome, and which may have suggested such an arrangement to Maderno. Passing this, you come to a feature wholly Spanish, and which probably no other church possesses, though one that, it is much to be regretted, was not often repeated. In order to understand this, it must be recollected that it is an essential feature in Spanish ecclesiastical arrangements that the choir should occupy the centre of the nave, facing the altar, and in most cases blocking it up and destroying the vista and general proportions of the building. In the Church of the Escorial, and there only, has this arrangement been preserved without detriment to the architecture, inasmuch as you enter *under* the "Coro," through a low apartment divided by piers into three aisles, and which is practically 100 ft. long by the whole width of the church. Being imperfectly lighted, almost gloomy in fact, the dimensions and splendour of the church itself are immensely enhanced by this cavernous entrance. Beyond this the church is square in plan, and divided, by the four great piers of the dome and the arches they sustain, into a Greek cross in construction. The proportions of the church are good, and the details of the Doric Order, with which it is ornamented, are simple and unobtrusive, but on a scale designed for external architecture, and with details so large and bold as to be wholly unsuited for internal purposes, and which contrast most unpleasantly with the richness of the high altar, and the frescoes and decorations of the roof they support. This is indeed the great defect of the whole building, as carried out. The roof of the "Coro" was richly painted by Luca Giordano. The Ritratto of the high altar is rich and elaborate in decoration, as is the Capilla Mayor in almost all Spanish cathedrals. The pavement is of the richest marbles, and all this contrasts unpleasantly with the plain simple architecture of the supports of the dome. Either these ought to have been taken as the key-note of the composition, or they ought to have been decorated in harmony with the rest.

So much has been written, and from such different points of view, with regard to this "eighth wonder of the world," that it is difficult to

form an impartial judgment regarding it. In dimensions it is about half the size of Versailles, less than the Caserta at Naples, and not so large as some of the Austrian convents; but it is quite large enough for any palatial effect, and is, on the whole, as purpose-like and as well-proportioned a design as is to be found in any palace in modern times. Its defects are those inherent in the style, consisting in the employment of an "Order" where it was not wanted either for constructive or utilitarian purposes, and where it suggested neither; but what is worse than this is that it displays everywhere that absence of thought which must prevail where one man draws everything on a board before a stone is laid, and, in this instance, intensified by its being built in granite, which prevented a more lavish employment of ornament, or greater freedom in designing the details, which make the monotony of parts more painfully apparent in this than in almost any other design of modern times.

The number of windows with which it is pierced externally would not have been a defect if they had been grouped, or had the wall been surmounted by a cornicione, or any of the ordinary devices used to give it character; but its prosaic, factory-like forms are all the more offensive because of the magnificence of the church, and other internal features, which are seen from the outside. Internally, though the conception is everywhere good, it is so marred by defects in execution, that, notwithstanding the beauty of some parts, the whole must be considered as a failure; but it is one of the grandest, and certainly the gloomiest failure of modern times.

SECULAR ARCHITECTURE.

It is a relief to turn back from the granite coldness of the monkish Escorial to the secular or semi-secular buildings of the early part of the sixteenth century, and to revel awhile in the lawless exuberance with which the Spaniards expressed their joy at the expulsion of the Moors, and the discovery of the New World.

One of the earliest, as well as one of the most important, undertakings of the first half of the sixteenth century was the building, or rather rebuilding, of the University of Alcalá, by the celebrated Cardinal Cisneros or Ximenes. He so enlarged the basis of the school which formerly existed there, that shortly after that it became the second University of Spain, and almost a rival to Salamanca. The building was commenced apparently about the year 1510, under the superintendence of Pedro Gumiel, and continued to about the year 1550, by Rodrigo Gil Hontañón, and other architects of the period.

The principal façade of the University is a fair specimen, though not the best, of the style of the day. Its ornament is rich and exuberant, and, if not in the best taste, like many other Spanish façades, it is solid towards the base, and has an open arcaded storey at the top, which is certainly one of the most pleasing architectural features that can be applied to Palatial Architecture, giving lightness combined with shadow exactly where they are wanted for effect, and where they

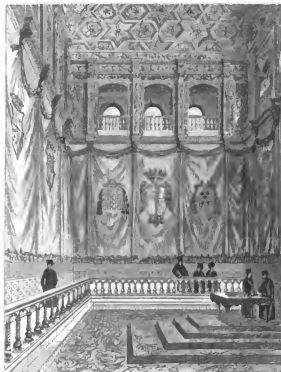
can be supplied without any apparent interference with solidity. Except, indeed, in buildings of the very monumental class, an arcade under the roof is a more legitimate way of giving shadow than a deeply-projecting cornice, and so thought the early Spanish architects, who, consequently, employed this feature everywhere, and generally with the most pleasing effect.



86. Court of the Archbishopal Palace at Alcalá de los Hernandis. From Verdier and Gutton.

Internally, the arrangements of the building do not seem designed for architectural effect so much as for convenience, though there are three cloistered courts, one of which is of very considerable magnificence, and the two smaller ones are also well worthy of attention. As architectural specimens, they do not equal the Court of the Archbishopal Palace, which belongs to the same age, and is extremely beautiful in its details, as may be seen from the annexed elevation of part of the edifice. The details of the bracket capitals of the upper storey are

as pleasing specimens as are to be found anywhere of a form which was felt to be indispensable for the successful carrying out of the widely-spaced system of supports which was then being introduced, and would be felt to be so now had we not sunk so completely into the groove of believing that what is Classical and established must be better than what is new or original. Still, a bracket capital is a desideratum in Architecture, and is one the Spanish architects were in a fair way of supplying when the Classical school of Herrera put a stop to progress in this or any other direction. The Italians tried it at a very



87. Parandifo, Alcalá. From Villa Amli, 'Espagne Artistique et Monumental.'

much earlier age. At Torcelli and elsewhere we find them as early as the twelfth century, but never after the Revival in the fifteenth. It does not seem to have occurred to the French architects that such a thing was wanted, in stone Architecture at least, nor have any of the northern nations attempted it; but the extreme elegance and convenience of this form is shown by the universal practice of Eastern architects, and the beauty with which it may be ornamented, and rendered ornamental, proves that its study will amply reward any one who will turn his attention to it. As a basis, he will hardly find better objects of study than the Spanish examples of the early part of the sixteenth century.

There is one State Apartment in the University, called the *Paraninfo*, which deserves attention not only for its intrinsic beauty, but from its being so essentially Spanish in design. The roof is of richly carved woodwork in panels, in a style borrowed from the Moors, and here called "*Artesonado*," of which there is another—perhaps more beautiful—specimen in the chapel, and under which is the "*Urna*" or cenotaph

of the great Cardinal. There are many—there were numberless—examples of the same sort of work in various parts of Spain, all beautiful, and all resembling this one more or less, though no two are exactly alike. Under this roof is an elegant range of arches, in the beautiful *Plateresque* style of that day, and the massive draperies below are perhaps as happy a mode of ornamenting the lower parts of the walls of such a room as can well be conceived.

In the monastery of *Lupiana* there is a cloistered court (Woodcut No. 88) similar in design to that at *Alcala*, but even grander, being four stories in height, each gallery being lighter than the one below it, and so arranged as to give the appearance of sufficient strength, combined with a lightness and elegance peculiarly appropriate to Domestic Architecture,



88. View in the Cloister at *Lupiana*. From *Villa Amil*.

especially when employed internally, as it is here. On the exterior of a building such galleries would be too light for effect, but round a small court it is not so; and in this respect the Spanish architects have been far more happy than their Italian brethren. The latter were always thinking of and reproducing the arcades of the Amphitheatre; the Spaniards were following a Moorish or Mediæval design, till the Italian fashions put a stop to their originality, and in so doing destroyed also their elegance.

It must be admitted, however, that some check was wanted to the exuberance of fancy in which the Spaniards seemed inclined to indulge at this age. It is almost impossible not to be charmed with the



89.

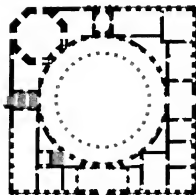
Court in the Palace of the Infanta at Zaragoza. From Villa Amal.

richness of the Patio in the so-called Palace of the Infanta, at Zaragoza, but, at the same time, not to feel that, though suited for ivory-carving or cabinet work, Architecture so applied is unworthy of the name, even

in its Domestic form, though there far less elevation and purity is demanded than in temples or buildings devoted to higher purposes.

There are not, it must be confessed, many examples of such wildness as this, but many of the Lupiana style. There is, for instance, a staircase in the Hospital of Santa Cruz, in Toledo, which almost surpasses it. But it must also be admitted that the Spanish mind was almost as frequently tempted to luxuriate in a half-Gothic, half-Classical style, as in the Palace of the Dukes of Infantado, at Guadalajara, at Burgos, Valladolid, and fifty other places that might be quoted, where we are more astonished by the richness of the decoration than delighted at its elegance; but, even in its worst phase, this exuberant style is far preferable to the cold, tame mediocrity of the succeeding age, and there are always, at least, some parts which may be unreservedly admired. In fact, wherever an edifice was erected or repaired during the first half of the sixteenth century, we are almost certain to fall on details of the best sort: and for any but the very highest purposes of Art, it would be difficult to find a style more appropriate than this is.

The buildings described in the last few paragraphs may all be considered as provincial examples, where the Spanish architects followed out their own peculiar ideas of what Renaissance Architecture should be, uninfluenced by either Italian designs, or the knowledge of what had been done elsewhere. This was hardly the case with the buildings erected for the Court, of which a notable example is found in the Palace adjoining that of the Moorish Kings, in the Alhambra, and which



90. Plan of the Palace of Charles V. in the Alhambra.
Scale 100 feet to 1 inch.

Charles V. commenced for his own residence about the year 1527, from designs by the Spanish architect Machuca, though the principal part of what we now see appears to have been erected by Berruguete. It unfortunately suffers, as any quasi Classical building must do, from its immediate proximity to the Alhambra, and is also much abused, because it is asserted that some portion of the Moorish Palace was pulled down to make room for it. This, however, is more than doubtful; for it is by no means certain that the Alhambra was ever finished, or intended to be so, on a uni-

form plan; and the mode in which one angle of the new Palace was cut off, in order not to interfere with the old buildings, is in itself sufficient to refute the calumny.

As it now stands, the building is very nearly an exact square, 205 ft. each way, with a circular court in the centre a little less than 100 ft. in diameter. The basement is as nearly as may be half

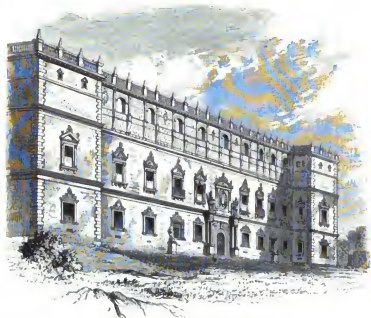
the height (28 ft.), very boldly rusticated, and contains a mezzanine with circular windows. A similar arrangement of windows prevails in the upper storey externally, but was meant only to light and ventilate the state apartments. The Order of the basement is Doric—of the upper storey, Ionic—neither used with much purity, but combined with so much ornament, and that of so elegant a class, that the effect of the whole is extremely pleasing. Except in the centre of each face, the Orders are almost entirely subordinated to the ornamentation of the constructive details of the building, such as the window-dressings, panelling, and sculptured decoration; and where this is the case their introduction is seldom offensive. In the interior, the circular gallery is supported by a tall Doric Order on the ground floor, on which stands an Ionic Order of little more than half its height, a proportion which prevents any idea of weakness in the supports.



91. Part Elevation, part Section, of the Palace of Charles V. at Granada. Scale 50 feet to 1 inch.

The Palace never was finished, so that we cannot judge of the mode in which it was proposed to ornament the principal rooms, nor do we know what the form of the roof would have been externally; but, as it stands, it may certainly be regarded as an elegant and pleasing specimen of Renaissance Architecture—not so grand or bold as the contemporary specimens at Rome or Florence, nor so picturesque as those of France—but dignified, elegant, and palatial, and free from any offence against good taste to an extent not often found in buildings of this class and age. Although much more Classical than those just described, it is still sufficiently original to be purely Spanish. There is no building, either in Italy or France, of that age which can be said to be in exactly the same style, though it is evident, from what we find here, that Spain with all the countries of Europe were then tending towards that dull uniformity of design which is the painful characteristic of the succeeding century.

The Akazar of Toledo is nearly of the same age as the Palace of Granada. The rebuilding of it, at least in its present form, seems to have been commenced by order of Charles V. in the year 1568, though not finished till it had felt the icy touch of Herrera under the reign of Philip II. The courtyard in the centre, which consists of two tiers of arches resting on pillars, is pleasing, but without the poetry of those at Lupiana or Alcalá, being sadly deficient in richness or



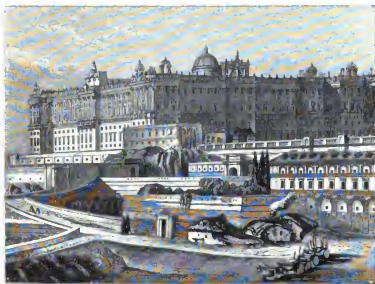
92.

View of the external Façade of the Alcazar at Toledo.

variety. The most pleasing feature is, the design of the western (?) façade externally, exhibiting the truly Spanish features of solidity below with increasing richness and openness above, which, as before remarked, is so effective, and so little understood out of the Peninsula. It is now in ruins, having suffered from fire on several occasions, and is one of those buildings which artists do not draw, though it seems well worthy of more attention than has hitherto been bestowed upon it.

Judging from what we know of the history of Spain from the death of Philip II. down to the present day, we should hardly expect that his weak successors would be capable of any great or successful effort of architectural magnificence. It happened, however, that the Royal Palace at Madrid was burnt to the ground on Christmas Eve in 1734, when Philip V. determined to rebuild it on a new site, on a scale of magnificence corresponding to a Spaniard's idea of his own importance; and Ivara, an Italian architect, was employed to realise this conception. From what we know of his designs in Italy, it is perhaps a matter of very little regret that, like most things Spanish, it never was realised; but a much smaller one was erected by another Italian, Sachetti, on the old site, and, considering that it was commenced in 1737, it is a very fair specimen of the age and style. It is a solid square building, measuring 404, or, according to some authorities, 440 ft. each way, with a courtyard in the centre 240 ft. square; and as its height, at least on the side facing the river, is nearly 100 ft., the

mass is very imposing. It loses much of this effect when it comes to be examined, in consequence of its being cut up by a multitude of small windows. The rusticated basement has three stories of windows; three more are included in the Order which stands upon it, and a seventh is visible over the cornice. Either it must be that the rooms on the principal floor have two stories externally and one internally, or there cannot be a single apartment of a height suited to a palace in the whole building. The details, too, are generally coarse, and frequently designed with that absence of constructive propriety which characterises the Italian Architecture of the day, so that the present palace has little beyond its mass and the general grandeur of its outline to recommend it for admiration. In so far as we can judge from such drawings as exist, the old buildings which it superseded had a good deal in them that was certainly more picturesque, and probably even more artistic. The principal façade was in three stories, and had only three ranges of windows—one in a plain basement, the two upper each with their own Order, and of palatial dimensions and height. It looked like a palace in reality, not like an asylum or hospital trying to look like a building of a higher class.



93.

View of the Palace at Madrid. From a sketch by D. Roberts, R.A.

The Palace at Aranjuez is next in importance among those of Spain after the Escorial and that of the metropolis. Although not very remarkable either for its dimensions or the beauty of its details, it is generally in very tolerable taste, and free from many defects found in contemporary examples of the same class of buildings. The central portion is sufficiently dignified without being overpowering, and the



91.

The Museo at Madrid. From a Photograph.

wings are well proportioned to the central mass. The junction between these two parts is pleasingly accentuated by the domes in the angles, and the whole sky-line sufficiently broken to prevent monotony. Taking it altogether, there are few buildings in Spain, of the same age (it was rebuilt in 1739 by Philip V.), which are so little objectionable as this.

San Idelfonso is a Spanish Versailles, but on a much smaller scale, with more tawdry details, and, though with more pretension than Aranjuez, is very contemptible in general design. The Belvidero and Buen Retiro deserve no mention in a work pretending to describe only objects of Architectural Art.

As Spain has no municipal institutions worth mentioning, she has no municipal buildings of sufficient importance to be alluded to here. At some of her principal ports there are Lonjas or Exchanges which are buildings of some pretension. That at Seville was built by Herrera, and is probably the best example we have of his style, being regular and chaste, without the extreme coldness and formality of his usual manner. The Lonja at Barcelona is also much admired, but it will easily be understood that its real merits are not great when it is known that it was rebuilt in 1772 from the designs of a local architect, Juan Soler. It is, according to the usual recipe, a basement with the usual complement of windows, one storey high, on which stands a range of pilasters including two, with pediments, &c., at intervals.

At Madrid, where one would naturally expect something better, there does not seem to be any building worthy of notice as a specimen of Architecture. Ponz and others quote the *Carcel del Corté*, or prison for the nobles; but it certainly would be considered a very contemptible specimen of the art, either for dimensions or style, in any provincial town in England; and the Council House and other buildings which ought to be of importance are as commonplace as we can imagine anything to be. The one exception to this seems to be the Museo—a gallery of pictures, which, if not quite successful in design, has so many good points about it as to be well worthy of study, and, with a very little more taste in the arrangement of the details, might have been a really fine building. It was commenced in the reign of



95.

Carcel del Corté at Baeza. From *Parcerisa*.

Charles III., by an architect of the name of Juan de Villaneuva, but was not completed till some time afterwards. The principal façade has the merit of having its entrance well marked by a portico of six Doric columns, which are not surmounted by a pediment, and on either side is a basement of good proportion and elegant design, supporting an Ionic colonnade, behind which is an attic crowned by a cornicione of appropriate dimensions and design. There is no concealment and no false construction anywhere, and the Classical details are used with truth and propriety throughout. Its principal defects are that the order of the portico is too plain and simple for the rest of the design. The unbroken entablature adds to this defect, and the attic over it is

badly managed. When a larger Order is used with a smaller, the first ought to be as ornate, and cut up into as many parts, as possible, so as not to overpower its modest neighbour, and the smaller ought to be made, by simplicity of parts, to look as if it were only a smaller part of the larger. The opposite course has been followed here; consequently a very good design fails to produce an effect to which it very nearly attained.

In the provinces there are occasionally to be found examples of the early Renaissance Art, as picturesque and as pleasing as any that exist either in Italy or France, and with that peculiar exuberance of detail that was so characteristic of the style in Spain. Few of these have yet been drawn with anything like exactness—few indeed have ever been described; but if a more cosmopolite feeling should ever prevail in Architectural Art, there are many examples here which may be considered as well worthy of admiration.

As an instance, the *Carcel del Corté* at Bacza (Woodcut No. 95) may be quoted, not as remarkable for either size or purity of design, but as possessing that indefinable grace arising from honesty of purpose and correct application of ornament to the parts where it is wanted. There is also a certain breadth of design, and a pleasing proportion between the solids and the voids which conduces so essentially to architectural effect.

It may be asked, where do the Grandees of Spain live? Surely their palaces ought to be commensurate with their pride, and present architectural features worthy of attention? The question is easier asked than answered. They certainly do not live in the country. There seems to be nothing in Spain corresponding with the English Park or French Château; nor is there, so far as is known, one single country-seat in the length or breadth of the land worthy of being commemorated. When not in Madrid, the nobles seem to live in the provincial towns near to which their estates are situated, but not in palaces even then; nor do their residences in the capital seem worthy of attention. Ford describes the façade of that of the Duke of Medina Celi as looking "like ten Baker Street houses put together," a description which, it is feared, is only too correct. If the others are in the same style, they may be very characteristic of the present position of the nobility of Spain, but must be beneath contempt as works of Architectural Art.

On the whole, perhaps, we should not be far wrong in assuming that the Spaniards are among the least artistic people in Europe. Great things have been done in their country by foreigners, and they themselves have done creditable things in periods of great excitement, and under the pressure of foreign example; but in themselves they seem to have no innate love of Art, no real appreciation for its beauties, and, when left to themselves, they care little for the expression of beauty in any of the forms in which Art has learned to embody itself. In Painting they have done some things that are worthy of praise; in Sculpture they have done very little; and in Architectural Art they certainly have not achieved success. Notwithstanding that they have

a climate inviting to architectural display in every form,—though they have the best of materials in infinite abundance,—though they had wealth and learning, and were stimulated by the example of what had been done in their own country, and was doing by other nations,—in spite of all this, they have fallen far short of what was effected either in Italy or France, and now seem to be utterly incapable of appreciating the excellences of Architectural Art, or of caring to enjoy them.

PORTUGAL.

ARE there any buildings of Renaissance Style in Portugal worthy of note? If there are, they seem to have escaped the attention of artists and tourists. The old books represent a palace of some grandeur at Lisbon, with a splendid plaza in front of it, where, on state occasions, they used to butcher bulls and burn nonconforming Christians; but the earthquake seems to have swallowed it up, though, like Cromwell's Ironsides, who are made to account for so many of the crimes and shortcomings of churchwardens in our own country, this celebrated catastrophe has to bear the blame of so much that we are led to suspect that it was really hardly so destructive as it is said to have been.

Be this as it may, the Convent at Mafra seems to be the only really grand structure of Renaissance Style in the country. It was built in consequence of a vow made during a dangerous fit of illness by John V., from the designs of an architect named Ludovico, and said to be a German. He commenced it in 1717, and it was practically completed in 1732. Its dimensions are such as to surpass those of the Escorial, being 760 ft. east and west, and 670 north and south.

The church in this design stands in the centre of the principal façade, instead of being thrown back, as in the Spanish example, and, in consequence of being only of the same height, and not much grander in design than the domestic buildings which flank it on either side, it certainly lacks the dignity which the other possesses. In other respects it is, externally at least, very much superior to its rival. The flanking towers are more graceful, the dome better proportioned, its details are more elegant and appropriate, and it has the advantage of a magnificent flight of steps leading to its portals, so that, were it not that the wings overpower it, it ought, in every sense, to surpass the boasted creation of the bigot Philip. The rest of the building externally is also very much more pleasing than the Escorial, the Domestic parts being broken up in masses, which prevent the cold monotony that destroys the effect of the Escorial, and, being generally only three—seldom four—stories in height, it has a palatial air, which is entirely wanting in the seven and eight storied palaces of Spain.



96.

Palace at Mafra. From a sketch by Charles Landseer, R.A.

It is much to be regretted that this building is not better known, and has not been more carefully illustrated, for, though it has faults of detail—perhaps not a few—there is probably no palace erected in the eighteenth century which is so free from them, and which has a greater air of grandeur than this: considering, too, that, like the Escorial, it contains a monastery combined with a palace, the difficulties it presented to an architect were such as it was by no means easy to overcome.

If the Portuguese do not wish to be considered as the least artistic people in Europe, they would do well to publish some illustrations or statistics of the works of Art they possess. So far as is now known to the world in general, they never produced a painter or sculptor worth mentioning; they have no architect whose name is known out of his own country; and, considering their history, their former wealth and power, and their opportunities, they certainly have produced, in proportion, fewer buildings worthy of note than any other nation of Europe.

BOOK III.—FRANCE.

INTRODUCTION.

THE history of the introduction of the Renaissance Architecture into France differs in many essential particulars from that of its rise in Italy, as well as from that of its adoption in Spain.

In Italy it was a spontaneous growth, arising from circumstances which have been detailed in the foregoing pages. In France it was an importation from the south, after the style had acquired completeness and consistency in the land of its birth. The principal reason for its adoption in France was the revival of classical literature, which had exercised so great an influence in its development in Italy. But more than this was the secondary cause, that the Art and artists of Italy had acquired a name and fame in the beginning of the sixteenth century which rendered fashionable whatever they did, especially in Painting and Sculpture. Had the Northern nations been content to emulate them in these two arts only, all would have been well; the mistake was, their including Architecture in the same category. In a jubilant, unreasoning age like that, we should not be surprised at this want of discrimination, however much we may regret the result.

The campaigns of Charles VIII. and of Louis XII. had done a great deal towards making the two nations acquainted with one another; but it was not till after the memorable expedition of Francis I. that the French became thoroughly familiarized with Italy and her works of Art, and conceived the desire of rivalling her in her artistic career, even if they could not succeed in annexing her politically to their own kingdom.

Very little was done in this respect by either of the first-named monarchs; but Francis I. (1515–1546) was fairly bitten by the Italian mania of the day. One of the first results of his visit to Italy was to bring back Leonardo da Vinci to France; and he invited thither Benvenuto Cellini, Primaticcio, and Serlio—men of note in their own country, all of whom were employed by him in the works at Fontainebleau, and elsewhere; and, although a number of Frenchmen were still employed on his undertakings, the influencing minds were the Italians; and the native artists laboured only to rival them in the style they were introducing. The consequence was, that during the reign of Francis the new style became thoroughly established, and, long before the accession of Henry IV., the Gothic had come to be regarded as barbarous, and fit only for the Dark Ages.

Though thus introduced from Italy, the French adopted the new

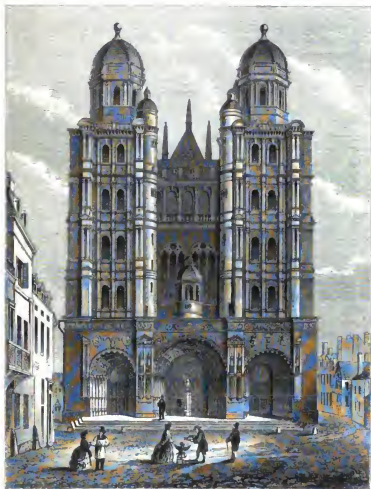
style with a very different feeling from that which had guided the Italians in its elaboration. The French had a perfect Gothic style of their own, to which they had long been accustomed to look with admiration, and which they had been gradually adapting to their more civilized wants, long before they thought of introducing the Classical style of Rome. Any one at all familiar with the Civil Architecture of the fifteenth century in France, knows how the Flamboyant style had been modified to meet the wants of the age. The openings had been made frequent and large, the windows square-headed, mullions had to a great extent been dispensed with, and generally the Municipal and Domestic Architecture was as elegant, and nearly as cheerful, as that which superseded it.

It would indeed be a curious subject of speculation to try and guess what the style would have become had no Roman remains existed, and had the French never crossed the Alps: probably not so very different from what it afterwards became. The pointed arch certainly would have disappeared; so would buttresses and pinnacles; wooden roofs would, to a great extent, have superseded stone vaults in churches, and the improvement which was taking place in figure painting would probably have required the suppression of mullions and tracery in the windows. In Domestic Architecture, string courses would most certainly have been more extensively used to mark the stories; balconies would have been introduced, for their convenience, and probably also cornices, to mark the eaves.

All this might have resulted in very much what we find now; except—and the exception is most important—that a mania would never have arisen for spreading a network of pilasters and three-quarter columns over every part of a building, whether they were wanted or not, and where they had not even the merit of suggesting a reason for their employment. It is useless, however, speculating on the past—it is sufficient to know that Gothic had become impossible, and that something very like the forms then adopted had become inevitable, though we cannot but regret that their introduction was accompanied by the trammels of a style foreign to their use, and which eventually so far got the mastery over the real artistic exigencies of the art as to render it subject to those vagaries which have had so pernicious an effect on the Architecture of modern Europe.

The French Renaissance differed further from the Italian in this—that it grew directly out of the Gothic; and, instead of trying to copy Roman temples, or to rival their greatness, all the French architects aimed at, in the early stages of the art, was to adapt the details of the Classical styles to their Gothic forms; and, throughout France, a number of churches are to be found in which this is done with very considerable effect. The church of St. Michael at Dijon is as fair an average specimen of this class of church in France as that of San Zaccaria (Woodcut No. 37) is of the Italian group; the great difference being, that in the French example the form is essentially Gothic, though the details are Classic. In the Italian example there is nothing that would be called Gothic on this side of the Alps. In the church at

Dijon every form is essentially Mediæval; and the Classic details are applied without any constructive propriety, and, it must also be admitted, generally without any ornamental effect. At least, so we think now; but it is easy to understand that, in the age in which it was built, it may have been considered a perfect example of Roman Art.



97. Façade of the Cathedral at Dijon. From Laborde, 'Monumens de la France.'

It frequently happens in France that the eye of the tourist is charmed by the effect produced by the outline of these quasi-Classical buildings—as, for instance, when contemplating the dome which till recently crowned the intersection of the nave and transept of the

Cathedral at Bayeux, or the western towers of Matilda's Abbey at Caen; and, though the Gothic purist is offended at such innovations, there is little doubt but that they frequently were improvements, and might always have been so had a little more taste been displayed in the adaptation of the new forms.

Another point of difference between the French and Italian styles was that the earliest Renaissance buildings in France were palaces or châteaux, and nine out of ten of these situated in the country. Francis I. was no church-builder; but all the energies, all the resources of the Art of his day, were devoted to Fontainebleau, and such palaces as Chambord, Madrid, Chenonceaux, and others of the same character. In these situations, where the building was required to group with the undulations of the country and the irregular growth of trees, or the adjuncts of outhouses, regularity would have been as inartistic as it was uncalled for. On the other hand, a Roman or Florentine palace, bounded by straight streets, could not be otherwise than rectangular; and any irregularity would have been as impertinent as it would have been inappropriate. In the country, high roofs and a broken sky-line harmonized with the scenery, and gave elevation and dignity to a building that could be seen on all sides and at all distances. A high roof cannot be seen from a street, and a broken sky-line is lost when the spectator is close under a building. In fact, a Farnese palace would have been as much out of place on the banks of the Loire, as a Chambord would have been in the narrow streets of Rome, or a Chenonceaux on a bridge over the Tiber.

Another proof of contrast between the arts of the two countries is the unity that marks the history of the art in France, as compared with that of Italy. In the former country we have no strongly-marked provincial peculiarities like those which distinguish the style of Florence from that of Rome, and both from what is found in Venice. The art was introduced into France by her kings, and it was from Paris—and from that city only—that all the designs proceeded which either influenced or were executed in the provinces. There are no local styles or local peculiarities which require remark. From the time of Francis I. to the present day, Paris has been the literary and artistic, as well as the political, capital of France; and the thread of our narrative may therefore be continuous and uninterrupted.

As the early stages of such a transition are those which it is always most difficult to understand, we are fortunate in possessing in the works of Androuet du Cerceau, published in 1576-79, during the reign of Henri III., a complete picture of the Architecture of his day, and as complete an indication of what was then admired or aspired to.

At the time he wrote, sufficient feeling for the old style still remained to induce him to illustrate Couci and Montargis, as two of the "*plus excellents bastiments de la France*;" but the Louvre and the Tuileries were the great projects and the most admired designs of that day. Next to these come Blois and Amboise, Fontainebleau, Chenonceaux, Madrid and Gaillon (since destroyed), Vallery and Verneuil, and the unfinished palaces of Charleville and Ecouen.

Another characteristic difference between the styles of France and of Italy, as well as between the old Gothic and the Renaissance, is, that among some thirty or forty buildings no church is illustrated in the works of Du Cerceau. In Italy the transition began with churches; and St. Peter's gave a tone to the whole style, and fixed its characteristics. In France, it is true, St. Eustache had been built, and St. Etienne du Mont restored, and various patchings and rebuildings had gone on; but kings and men of taste did not trouble themselves with these matters. The Crown gave the tone, and the Palace led the way, in Art. Hence, perhaps, much of the frivolity, but hence, also, much of the grace, that distinguished French Art as compared with Italian. In France we have not the great conceptions which so often redeem the faults of detail of the early Italian styles; but, on the other hand, we have a style generally of greater elegance, and which seldom fell into those exaggerations of detail which so often disfigure the designs of even the best Italian masters.

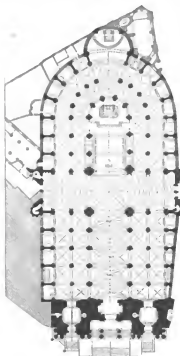
Although the Renaissance style was imported from Italy into Spain about the same time, and nearly in the same manner, in which it was introduced into France, the character of the two nations was so different that the same seed soon produced very different results. The early Plateresque style of Spain was based far more on the delicate and exuberant style of ornamentation introduced by the Moors, than on anything brought from Italy, or that is found in France; and was cultivated because in that age there seems to have been an immense desire to display easily acquired wealth without the corresponding power to realize grand conceptions, and which consequently found vent in extreme elaboration of detail rather than in grandeur of design. This effervescence soon passed off, and the reaction was to the cold gloomy Greco-Romane style of Herrera and his contemporaries, at a time when the French were indulging in all the wild caprices of the Henri Quatre style. From this the French proceeded to the invention of the gay but grand and original style of the age of Louis Quatorze. The Spaniards stopped short in the career of invention, and became either copyers of the French or borrowers from Italy.

CHAPTER I.

ECCLESIASTICAL ARCHITECTURE.

RENAISSANCE.

ALTHOUGH it cannot be said that church-building was either the earliest or the most satisfactory form which the development of the Renaissance Art took in France, it will be convenient, as in other instances, to take it first, having already enlarged sufficiently on the principles which guided the architects of that day in abandoning the old style for the more fashionable form of Classic Art.



96. Plan of St. Eustache, Paris. From Lenoir, 'Statistique Monumental de Paris.'
Scale 100 ft. to 1 inch.

One of the earliest—and certainly one of the most complete and best specimens of the Renaissance style—is the well-known church of St. Eustache at Paris. The foundations were laid in 1532, though the church was not completed till nearly a century afterwards. Though thus commenced twenty-six years after St. Peter's at Rome, and carried on simultaneously, it is curious to observe how different were the principles on which the two were constructed—St. Eustache being in reality a Gothic five-aisled church in all essentials both of arrangement and construction, and it is only in the details that an experienced eye perceives the influence of Classical Art, and remarks the unhappy effect which

results from trying to adapt the forms of a particular style to purposes for which they were not originally intended.

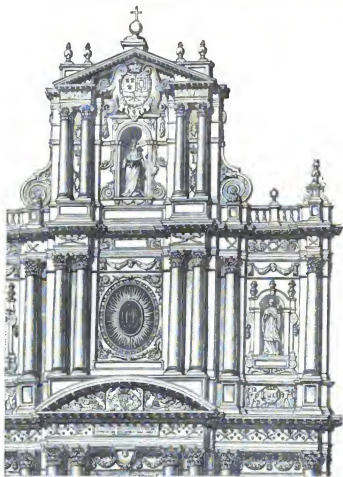
Notwithstanding this, it cannot be denied that St. Eustache is a very beautiful and elegant church. If its windows were filled with

stained glass, for which they are, in fact, better adapted than the more heavily mullioned openings of purely Gothic buildings, and its walls relieved by paintings, it would rival many buildings as a work of Art, though it might fail in that solemnity which should characterize a religious edifice. Its dimensions, too, are considerable, being 328 ft. from east to west, and nearly 150 ft. in general width, and 90 ft. in height to the ridge of the vault; and throughout it is impossible to point to a single detail which is not elegant—more so than most of those found in Gothic buildings—or to anything offensively inappropriate. Notwithstanding all this, the effect it produces is far from pleasing. Everywhere the eye is offended by the attenuation—it might almost be called the wiredrawing—of Classical details, and the stilted that becomes necessary from the employment of the flatter circular arch, instead of the taller pointed one. The hollow lines of the Corinthian capitals are also very ill-adapted to receive the impost of an arch; and when the shaft is placed on a base taller than itself, and drawn out, as is too often the case here, the eye is everywhere shocked, the great difference being, that the Gothic shaft was in almost all instances employed to indicate and suggest construction, and might therefore be 100 diameters in height without appearing weak and inappropriate. In Gothic Art, the real construction was in the pier or wall behind it; but the Roman Orders were the construction itself, and are only appropriate where they are so—when used merely to suggest it, they become ridiculous. The façade of the church was originally designed on the same principles as that of St. Michael at Dijon (Woodcut No. 97), and was partially executed in that style; but, being left unfinished, it was completed in the reign of Louis XIV., in the more Classical form in which we now find it.



99. Bay of St. Eustache. From Lenoir.

The church of St. Etienne du Mont is another Parisian example of this style. The rebuilding of this church was practically commenced in 1537, and dragged on through a long period, owing perhaps to the delay that must always take place when one part of a building has to be removed before that which is to replace it can be commenced. It is far from being so complete and satisfactory an example as St. Eustache, though, like it, St. Etienne is a Gothic church disguised in the trappings of Classical details. The most remarkable feature about it is the Hood Screen, with the Staircases of the lightest open work which lead up to it on either hand. This is a poetical and beautiful conception, but marred by the details being neither constructional nor elegant in themselves. The whole church would be very much improved by the introduction of colour, which evidently



100. Part of Façade of Church of St. Paul and St. Louis, Paris. From Rosengarten.

formed part of the original design; but nothing, it is feared, could ever reconcile the conflict between the two styles, which pervades the whole, and gives rise to such discrepancies as are everywhere apparent.

There is a church in Dieppe very similar to this, and generally, throughout France, it is common to find repairs in the style of these two Parisian examples, in churches which, having been commenced in the fifteenth century, were continued during the sixteenth. All these quasi-Classical features were unmeaningly introduced in this pseudo-Gothic style, which was practically the only one employed in church-building in France during the course of that century; so that it is almost a relief to come to downright introduction of Classical forms,

in the position and used for the purposes for which they were, or rather were supposed to have been, designed. If it was necessary that Gothic Architecture should be abandoned, it certainly was not by this compromise that it could be worthily replaced. Any perfectly honest constructive forms would have been better than these Classical imitations; but, as that was not to be, it is with a feeling almost of satisfaction that we come even to the unmeaning tameness of the Louis Quatorze style of Ecclesiastical Art.

Before it settled down to this, the French architects adopted for a while almost literally the style introduced in Italy by Maderno, Borromini, and others of that class, and which, as before remarked, was disseminated all over Europe by the Jesuits. The church of St. Paul and St. Louis at Paris is one of the most typical examples of this class in France. It was commenced in 1627, and finished in 1641. The façade is three stories in height, and covered with the usual mass of unmeaning ornament. The general effect produced is rich and picturesque, but very unsatisfactory; pillars with their entablatures and the various other ornaments used being merely pieced together so as to cover the whole surface of the façade, without the least reference either to the purposes for which pillars were originally designed, or to the constructive necessities of the building where they are now found.

The interiors of the churches of this—which may be called the Jesuit style of Art—were not more satisfactory than the exteriors. Such architectural mouldings as were used were of the most contorted Rococo character. The sculpture employed consisted of sprawling figures of half-clothed angels, or of cherubs, or of saints, and was generally unsupported—or at least not sufficiently supported—by the construction, and the paintings which were interspersed with these belonged to the most theatrical and the least devotional style of Art which has yet been seen.

It was fortunate that this transitional style did not last long in France. But specimens of it are to be found in every capital in



101. Jesuit style of decoration. From Rosengarten.

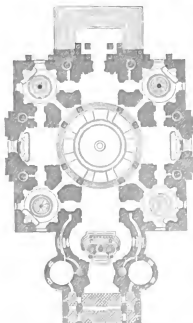
Europe where the Jesuits obtained a footing, and many of its forms are so gay and so taking with a certain class of minds that traces of them are found long after the style had ceased to exist as a whole.

The church of the Sorbonne, the first stone of which was laid in 1629, may be quoted as one of these examples which mark an epoch and complete a stage of transition. It was designed by Le Mercier,¹ under the orders of Cardinal Richelieu, and the greatest pains were taken, by consulting architects both in France and Italy, to make it as perfect as possible. It became in consequence a little St. Peter's, with the addition of some of those improvements which Palladio and others of his school had subsequently introduced into the style. It is a church of no very great dimensions, being about 150 ft. in length, and its dome 40 ft. in diameter internally. The western façade has the usual arrangement of two stories, the lower one of Corinthian three-quarter columns, surmounted by pilasters of the same order above, and the additional width of the aisle being made out by a gigantic console. The front of the transept towards the court is better, being ornamented with a portico of detached columns on the lower storey, with a great semicircular window above; and the dome rises so closely behind the

wall that the whole composition is extremely pleasing. So it was evidently thought at the time, for it is illustrated in every contemporary book on Architecture, and praised as a *chef-d'œuvre* of Art.

Another very similar work was commenced for Anne of Austria, by François Mansard,² at Val de Grace, in the year 1645; but finished by other architects, and in reality presents no points of novelty to distinguish it from that last quoted. There are several other churches of the same class in the capital and its neighbourhood. Their style is that found in Italy as prevalent during the sixteenth century, though in France they may generally be taken as characteristic of the age of Louis Quatorze.

The one really remarkable building of this age which stands out from the rest, and is one of the most elegant structures of its class, is the Dome of the Invalides. It

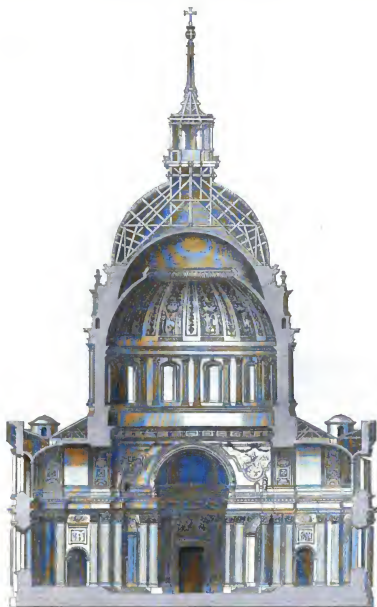


102. Plan of the Dome of the Invalides at Paris. From Isabelle, 'Édifices Circulaires.' Scale 100 ft. to 1 inch.

has the misfortune of being an after-thought, attached to a much

¹ Born at Pontoise; died 1660.

² Born 1598; died 1666.



103. Section of Dome of Invalides at Paris. From Isabelle. Scale 66 feet to 1 inch.



104.

Façade of the Dome of the Invalides at Paris. From a Photograph.

plainer church, with which it is hardly in keeping, so that, though in reality only a part, it must be considered as a complete composition in itself. The dome was commenced in the year 1680 from the designs of Jules Hardouin Mansard,¹ and completed, entirely under his superintendence, in the year 1706, and is considered as thoroughly the typical monument of his genius as that of St. Paul's is considered as the monument of Sir Christopher Wren.

In plan it resembles that of St. Paul's, more than any other on the Continent, the four great piers which are universally employed abroad being placed so as to produce an almost octagonal effect, and are in fact pierced by doorways. The pillars standing free in front of those piers produce a confusion which is far from pleasing; for it is evident that they do not support the masses above, and their prominence in consequence takes away from the solidity so evidently demanded. The small openings through the piers do not produce

¹ Born 1647; died 1708.

the same effect as was aimed at in St. Paul's, of making the ground-plan truly octagonal, but, by restricting them to the dimensions here found, the four great openings are made half the width of the dome itself, which is far better than the proportion of 40 to 108, as is found in our example. The dome itself is 92 ft. in diameter,¹ and internally less than twice that dimension in height, which is also a more pleasing proportion than is usually found, both St. Peter's and St. Paul's being too lofty for the other dimensions of these churches. The eye, or opening, is very large, and above it is a second dome, which is painted, and produces a very pretty and pleasing, but very theatrical effect, unworthy of such a building.

The external dome above this is, like our St. Paul's, of wood, and so is the lantern, which deprives it of the dignity of that designed by Wren; but if a stone lantern could only be attained by the introduction of the cone which disfigures the English example, Mansard used a wise discretion in refraining from attempting it. But, having done so, perhaps it would have been better to have adopted an avowedly wooden construction externally, instead of one meant to look like stone. The external façade below the dome, though possessing no great novelty, is well and harmoniously designed; and the building being a Greek cross, and no part exaggerated, the whole is certainly one of the most pleasing examples of a domical building of this class in Europe, and wants only a very little to make it the typical and most beautiful monument of its class. It is true, nevertheless, that the introduction of two Orders, the one superimposed on the other, does detract materially from the dignity of the church, by making it appear two stories in height. But the introduction of only one range of pillars below would have reduced the dome to being a mere cupola. As in this instance—more even than in our St. Paul's—the dome was intended to be the principal feature of the design, it was probably prudent to sacrifice the church to increase its dignity; in fact, adding one more to the numberless instances which prove how intractable the Orders are when applied to modern purposes.

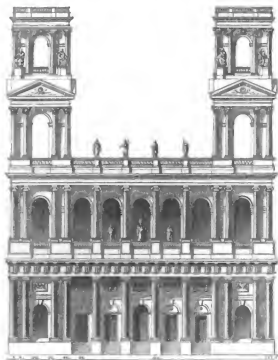
The body of the church of St. Sulpice does not, except in its size, present any features worthy of notice. Internally, it presents the defect inherent in Palladian churches, where an Order designed for external purposes is used on the scale, and with the simplicity, which suits a large area exposed to the atmosphere, but which becomes offensively rude when applied to internal decoration, in a building which not only pretends to but demands elegance and richness of effect.

The western façade, however, designed by Servandoni,² was added, in the middle of the eighteenth century, to the church commenced more than a century before that time from the designs of Le Veau; and,

¹ The plan and section, with the dimensions quoted, are taken from Isabelle's '*Edifices Circulaires*,' which is usually a most trustworthy authority; but I cannot help suspecting they are in excess. By most authorities the dome is made about 82 ft. in diameter, and this, on

the whole, seems nearer the truth. Of eight or ten works I have consulted, no two agree on this point. The dimensions given range from 76 ft. English to 92.

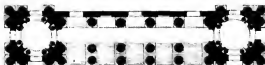
² Born 1695; died 1766.



105.

Façade of St. Sulpice, Paris, as originally designed.

though not without faults, it is one of the grandest of modern Europe. The width of the porch is 205 ft., consisting of two Orders, superimposed on one another, and rising to the height of 160 ft. to the top of the balustrade. It is flanked on each side by towers, one of which rises 100 ft. higher, but the two, as carried out, differ in height as well as in design. The lower or Doric Order is doubled, not in front, but towards the rear, thus giving great richness of effect, and great appearance of



106.

Plan of the Porch of St. Sulpice.

strength to the portico, and above this is an Ionic Order of good proportions, with an arcade behind, standing on the rear rank of the lower columns. All this makes up a composition not quite satisfactory, it must be confessed, but much more so than any of those above described as erected in Italy, certainly more so than any previous one in France; and very little more is in fact wanted to make it a

very beautiful design. It is said that Servandoni originally proposed a pediment between the towers, but happily this was not carried out.

Another portico, somewhat similar, was added a little before this time to the cathedral of Auch; but in this instance the towers are more important, and the centre too much subdued; so as to want dignity and to seem squeezed up between the lateral masses. The Order is Corinthian throughout, and the whole details so rich and so well designed as to produce a very pleasing effect, notwithstanding its incongruity with the Gothic cathedral to which it is attached.

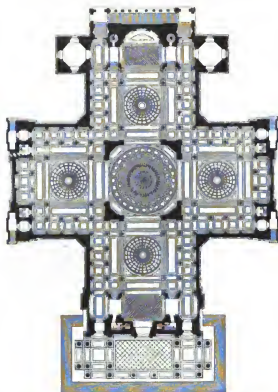
None of the churches mentioned above can compare, either in beauty of design or in size, with that of St. Geneviève, or, as it is more generally called, the Pantheon, at Paris; which, though smaller than St. Peter's, St. Paul's, and some others, may still fairly be considered as entitled to be ranked as the third or fourth of the great Renaissance churches of Europe.

It was commenced in the year 1755, in consequence, it is said, of a vow made by Louis XV. during an illness at Metz, but practically because the church of the patron saint of Paris, which stood immediately behind the present building, was not only falling to decay, but had long been considered as unworthy of its destination. After a considerable amount of competition, the design of Soufflot¹ was accepted, and was sufficiently advanced in 1764 to allow of the foundation-stone of one of the piers of the dome being laid by the king; but the building was not entirely finished until after the death of its architect in 1781. In consequence of its not being completed when the Revolution broke out, it was dedicated in the first instance to the "Grands Hommes" of France, instead of to God, or to the Patron Saint for whom it was originally designed.

The whole area of the church is 60,252 ft., or about that of an average sized Mediaeval cathedral; its extreme length being 362 ft., its breadth across the transept 267, and its height to the top of the dome 265 ft. The building is practically in the form of a Greek cross, surmounted by a dome in the centre 69 ft. in diameter internally, surrounded by four smaller flat domes, each 57 ft. in diameter. In front is a portico of fourteen Corinthian columns, of correct design, each measuring 60 ft. in height, being consequently one of the grandest porticoes erected in modern times; but the effect is painfully marred by the front columns being so widely spaced as to give an impression of extreme weakness to the entablature, which, being composed of small stones cramped together, looks feeble in execution when compared with the grandeur of the design. Another great defect is, that two of the columns are placed outside at each end of the portico, in a manner so unmeaning that it is difficult to understand how they came to be placed there; and the arrangement produces weakness and confusion to an extent to be found in no other portico of the same pretensions.

Beyond the portico the external walls of the church are plainer than are found in any other in Europe, the only decoration being that

¹ Born 1713; died 1781.



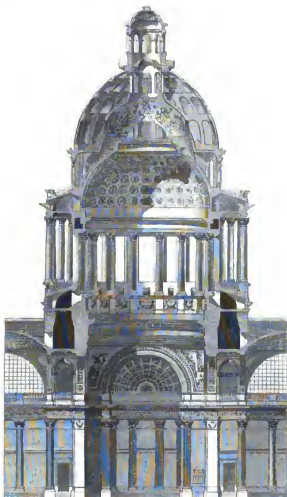
107. Plan of the Pantheon at Paris. From Isabelle, Scale 100 feet to 1 inch.¹

the entablature of the columns is carried round, and a band ornamented with wreaths, &c., which correspond with the capitals; but below them the wall is absolutely unbroken by even a single window, except in the rear, and is only ornamented by a group of plain pilasters on the angles. This is no doubt infinitely preferable to the Italian plan of introducing two or three stories of windows and an attic; but it is equally extreme, and almost equally objectionable, in the other direction. The best thing would have been to have allowed the great semicircular windows of the interior to be shown externally; or, if that were impossible, some windows, or niches, or panels,—anything, in fact, that would have reproduced the richness of the portico,—would have been an improvement.

The design of the dome externally is elegant and chaste, but on the whole very inferior to that of St. Paul's; the peristyle is weak,

¹ Though both the plan and section are carefully reduced from Isabelle's plates, the scale of the plan is about one-twentieth in

excess of that of the section: the latter, however, appears to be correct.



108. Section of the Dome of the Pantheon at Paris. From *Isabelle*. Scale 50 feet to 1 inch.

because unbroken, the attie too high, and the lantern too small and insignificant. It escapes, however, to a greater extent than any of its compeers (except perhaps the dome of the Invalides), from the objection that it stands on or rises through the roof; and a very little more would have made it satisfactory in that respect, but, as in everything else in the building, it nearly reaches, but always escapes, perfection.

On the whole, its internal arrangements are very superior to the external. No church of its class can compete with it in the elegance



109. View of the West Front of the Pantheon at Paris. From a Photograph.

of its details, or in the appropriateness with which the Classical features are introduced. Except a certain degree of weakness in some parts of the vaulting, introduced purposely to show cleverness, there is no fault to find with any detail, and the general effect is more elegant and pleasing than that of any Classical church which has yet been erected. Yet, as in every other part of the design, it is easy to see how it might have been better. Practically, the arrangement is that of four equal and similar halls, surrounding a fifth, which, being of the same dimensions in plan, though far superior in height, is not sufficiently dignified to be the centre of such a group. The mode in which four piers of the dome, with their accompanying pillars, are projected into the centre of the church, is very confusing, and the glimpse caught of the adjoining apartments behind them only adds to the complexity, without increasing the appearance of spaciousness.

It is evident that the object of the architect in adopting this arrange-

ment was principally to display his cleverness in construction, and to seek to astonish the spectator by one of those *tours de force* which are so common with a declining art, but which are absolutely fatal to true effect wherever introduced. In this instance it was very nearly entailing the destruction of the building; for so soon as the centreing of the great arches under the dome was removed in 1776, the piers began to show symptoms of weakness; but it was not till the dome itself was practically completed in 1779 that this proceeded to such an extent as to cause any real alarm for the safety of the building. On a careful examination being made at that time it was found that the principal cause of the failure arose from the faulty character of the masonry. The stones of the piers were truly and correctly worked only to a depth of about four inches from their face; the rest being roughly hewn and carelessly filled up with cement, so as to throw the greater part of the strain on the face of the pier. This was to some extent remedied by cutting into the joints with a saw, so as to relieve the pressure on them, and to throw it more on the centre. This was partially successful; but the mischief went on to such an extent that serious fears were entertained for the stability of the building, and in 1796 a commission of architects was appointed to examine into the matter, in the following year one of engineers, and a third combined commission in 1798; but the danger was such that no one could suggest a remedy, and after four years' debate it all ended in shoring up the great arches and leaving the building to its fate.

In 1806 M. Rondelet was appointed to repair the damage: he found that the piers had contracted to the extent of nearly six inches English, partly from crushing, partly from the sawkerfing of the joints in 1779. He at once set about replacing the damaged stones, and added also considerably to the mass of the piers, as shown in the woodcut, where the shaded part shows the pier as originally executed, the outline as it now stands. This was so successfully accomplished that no sign of weakness has since displayed itself in any direction, while at the same time the appearance of the church has been very much improved by the greater solidity given at the point where it was most wanted for effect.



110.

It is easy to see that the way in which all this might have been avoided would have been by setting back the piers of the dome against the angles of the building, and so increasing its size to a little over 100 ft. This the building could easily have supported, both internally and externally; and had it been done, as an interior it would have been absolutely unrivalled for architectural effect, while all the difficulties of construction would have been got over by the additional mass that could have been obtained without interfering with the effect, and the support that would have been afforded by the junction with the outer walls.

The columns of the internal peristyle of the dome being plain,

while those below are fluted, and the general poverty of the details of this important feature as compared with that of the rest of the building, produce a disagreeable effect, but one which could easily be removed by colour. This, in fact, is an addition which the whole building requires. It is too light, too gay, for a church; but if the great semi-circular windows were painted, and a moderate degree of tone introduced by colour in other parts, it might be placed beyond dispute that it was, and—what many are inclined to admit—that it is now the most beautiful interior of any modern church of Classical design.

REVIVAL.

At the time when the Pantheon was erected, it was considered the perfection of Classical imitation, and the greatest pains were taken that every part and every detail should be correct and supported by authority. Before it was completed, however, it was believed that perfection could only be obtained by even more literal copying, and as early as 1773 designs were prepared for an eminently Classical building, on the site where now stands the church of the Madeleine. Nothing, however, was then done, and the present building was commenced in 1804, from designs by Vignon. The dimensions are very considerable, being a rectangle measuring 350 ft. in length by 147 in width, and consequently covering more than 51,000 square feet. Externally it is, to all appearance, a perfectly regular octastyle peripteral temple of the Corinthian order. As nearly as may be, its columns are of the same dimensions as those of the Pantheon, but placed more closely together, though, on the other hand, being built of smaller blocks, they are as deficient in constructive dignity as the others. Internally, the clear space is 85 ft. by 280, divided, after the manner of the halls of the Roman baths, into three spaces by Corinthian columns, bearing arches. Each of these three compartments is surmounted by a flat dome, pierced by a skylight in the centre. At the north end is the apse, at the south a vestibule, and there is a range of chapels and confessionals round the sides ornamented by a smaller subsidiary order.

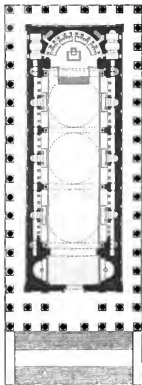
Taking it altogether, the arrangement is probably the best that could be adopted under the circumstances, and the whole church has internally an air of considerable grandeur and appropriateness to the purposes of the Roman Catholic ritual. As it now is, however, the light is insufficient, and the paintings, with the coloured marbles and an excess of gilding, produce a spotty and inharmonious effect, which time may cure, but which at present gives it more the air of a ball-room than of a place dedicated to religious worship.

Externally, it is hardly open to criticism as a Christian church. It is so exact a reproduction of a Heathen Temple, that it affords an opportunity of judging how far the Romans succeeded in attaining to beauty and dignity in their temples; and in this respect they have nothing to fear from an impartial criticism on their respective merits;

but in order to arrive at these it would be necessary to consider the Madeleine as placed on an eminence above the neighbouring buildings, or standing in a piazza surrounded by houses of one, or at most of two, low stories in height, and not, as this is, by dwellings of six or seven stories high, and of the most obtrusive architecture. It is here, indeed, that the Madeleine fails. It is too low, too simple, and too modest for its situation, and no dome or campanile, if attached, would help the matter. It is, in fact, unsuited to a situation in the centre of so tall a town as Paris; but, nevertheless, it must be considered—barring some minor defects hardly worth mentioning—as a very beautiful building. Its design will hardly, however, be repeated, for, if there is one thing which the experience of the Gothic architects settled more completely than another, it is that height and variety of outline are necessary to afford dignity to public buildings in towns; and their practice shows how easily and how successfully this could be accomplished.

Hittorf was therefore right when he added two towers to the façade of his Basilican Church of St. Vincent de Paul, which, after those mentioned above, is perhaps the most important of the modern churches of Paris. It is very Classical and very correct, and no fault can be found with any of its details; but somehow or other it is not a success, and, like most of the modern churches in Paris, fails entirely in producing the effect which is aimed at and expected in these edifices. It will be curious, therefore, to observe how far the modern French architects may succeed in their present attempts to reproduce, for ecclesiastical purposes, the Architecture of the Middle Ages. They commenced the attempt long after we had become familiar with its effects, but hitherto, notwithstanding their cleverness, they have certainly not been successful.

One of their most ambitious attempts is the church of St. Clothilde—Place belle Chasse—in Paris; and, though its dimensions are those of a small cathedral, it looks poor and insignificant internally, and the exterior has neither the solidity nor the picturesqueness which is always found in the old buildings, and which our architects have sometimes successfully imitated in their reproductions. The task of copying is, however, so easy, and so entirely independent of intellec-



111. Plan of the Madeleine at Paris.
Scale 100 feet to 1 inch.

tual exertion, that there can be little doubt but that, when they have collected and drawn a sufficient number of models, they will repeat them with a correctness that will deceive all but the initiated. It is only to be wished that they would apply their money and their talents to some better purpose, and, above all, that they would refrain from designing façades according to the newest Parisian fashion to such buildings as St. Ouen at Rouen, and many other remarkable and interesting edifices, which have lately been made to look as good as new, at the expense of those qualities which really give meaning to a building, and speak to the heart of mankind through all succeeding ages.

CHAPTER II.

SECULAR ARCHITECTURE.

RENAISSANCE.

THE history of Secular Renaissance Architecture in France may be conveniently divided into four great sections, distinguished by the name of the sovereign most prominent in encouraging Art during each of the epochs.

The first, extending from the accession of Charles VIII., 1483, to the death of Francis II., 1560, lasted seventy-seven years, and may be distinguished as the *Era of Francis the First*.

The second, commencing with the accession of Charles IX., 1560, and extending to the death of Louis XIII., in 1642, lasted eighty-two years, and may properly be called the *Age of Henri Quatre*.

The third, dating from the accession of the Grand Monarque, 1643, and extending to the Revolution, 1792, lasted, consequently, nearly 150 years; and is properly marked as that of *Louis Quatorze*.

The fourth, from that period to the accession of Louis Napoleon, may be designated as the *Revival*, or the *Period of the Empire*, and may even be extended to the present day; or the reign of the Third Napoleon treated as an Appendix to the epoch of his great uncle.

ERA OF FRANCIS I.

	A.D.		A.D.
Charles VIII.	1483	Henry II.	1547
Louis XII.	1498	Francis II.	1559
Francis I.	1515		

Whatever may be the defects or deficiencies of the Ecclesiastical Renaissance Architecture in France, she possesses in her civil buildings a series of examples, certainly far more extensive than any other country of modern Europe, and which may also probably compete successfully in artistic eminence with those of almost any other country, not excepting even Italy.

The immense accession to the power of her kings, from the consolidation of the empire, and the peculiarly monarchical institutions of the country, enabled—it may almost be said forced—them to rebuild the old châteaux of the fœdal ages on a scale commensurate with the wealth and power acquired subsequently to the accession of Francis I.

in the year 1515. The consequence was that the beautiful new palace, of the Louvre, with its accompanying château at the Tuileries, succeeded to the old confined fortalice bearing the first name, as the residence of the kings in the capital. Fontainebleau supplanted the royal hunting seat at Vincennes; and Chambord succeeded Plessis les Tours on the banks of the Loire; while St. Germain, St. Cloud, and other palaces, were erected, one after the other, in the neighbourhood of Paris, till they culminated in Versailles, the greatest and most splendid of modern palaces, though perhaps not the most successful as an architectural design.

The nobles were not backward in following the example of their kings, whose power and prosperity they shared. One by one the old feudal castles disappeared, and were replaced by more commodious and more suitable châteaux in the country, and palaces in the towns, so that, between the accession of Francis I. and the death of Louis Quatorze, the Architecture of ancient France had nearly disappeared, in so far as the residences of her kings and nobles were concerned, and was replaced by a series of country seats and palaces more numerous and more splendid than those possessed at that time by any other country, and combining in many instances the picturesqueness of the Gothic with the elegance of the Classic styles, to an extent not found elsewhere.

Of the other class of civil buildings they had little to destroy. Except in the Flemish provinces, the cities had hardly any municipal institutions which could give rise to much architectural magnificence. Whether we admire or not the Town-halls and Palais de Justice which are now found in most of her cities, we have not at all events to regret the destruction of those which preceded them, as we should do if Belgium and Flanders had replaced their municipal edifices by others in the fashionable style of the age of Louis Quatorze.

In their extent, in their richness of decoration, and the amount of wealth lavished upon them, it is probable that the civil and palatial buildings erected in France during the last three centuries and a half exceed considerably the ecclesiastical and feudal edifices which were built in that country during a like period anterior to the year 1500. But unfortunately it is impossible to institute such a comparison between the two classes, as artistic utterances, as would lead to any satisfactory conclusion. All the Art in the world could never elevate a palace, with all its domestic and social arrangements, to the same scale as the great hall of a cathedral, devoted only to the performance of a ceremonial of the highest and most ennobling class. No splendour in the residence of a noble can compete with the simple grandeur of a great monastic institution, where all the grosser and less elevating characteristics of human nature are at least kept out of sight, instead of being made more prominent by the luxury and frivolity by which they attempt to disguise themselves in the palace; and the old, real, independent sovereignty of the municipality in the middle ages expressed itself with a manly vigour that cannot be found in the last new design sent down from the Home Office at Paris.

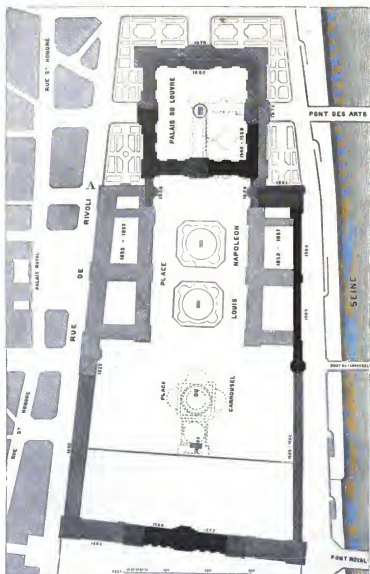
Besides this real difference in essence, came the more superficial difficulty of style. It is true that the French architects were never so completely enslaved to the Orders as the Italians became after Palladio, or the English after Inigo Jones; but they felt the chain, nevertheless, and would have done much better had they never known the influence of the Italian school, or tried to reproduce the glories of ancient Rome. The absurdity they committed was in fancying that the best way to ornament modern buildings on the banks of the Seine was to cover them all over with shreds of ornament borrowed from the Temples of antiquity on the banks of the Tiber. Although, therefore, the Renaissance Civil Architecture of France belongs intrinsically to a lower class of Art than the Ecclesiastical Mediæval Styles, and is further vitiated by the imitative being introduced to replace the constructive element, which is so essential in all true Art, it is still a style so elegant, so gay, and so characteristic, that its study will well repay any attention that may be bestowed upon it, provided it is entered upon without adopting the narrow class prejudices which are the bane of modern Art criticism.

THE LOUVRE.

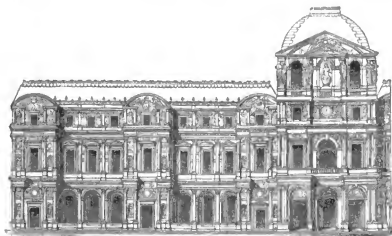
If not the greatest, certainly the most successful undertaking of Francis I. was the rebuilding of the Louvre. It had always been the principal residence of the kings of France in their capital, but had become so confined and utterly unsuited to the wants of the age, that there were only two alternatives—either to begin a new palace altogether, as Catherine de Medici did a little further west at the Tuileries; or to pull the old one down, and rebuild it. Francis decided on the latter plan, and invited the celebrated architect Serlio to furnish designs for the new palace. It is not easy to ascertain how far the ordinance of the present building was influenced by his designs; but it seems certain that the actual architect was Pierre Lescot.¹ He virtually made the drawings, and superintended their execution; but the whole arrangement is so beautiful, and the details are so elegant, that it is difficult to believe that any native architect was its sole author, at least if one may judge of what was done in France about this time and afterwards.

It is not quite clear when the rebuilding was actually commenced, but the part begun by Lescot, and completed in 1548, was the south-west angle, from the Pavillon de l'Horloge down to the river-face (Woodcut No. 112), and consists of two stories of Orders, each about 30 ft. in height—the lower Corinthian, the upper Composite. These are surmounted by an attie storey, only half the height of the two below it. Throughout the whole, the details and profiles are singularly correct for the age; and the ornamental parts, having been sculptured from the designs of Jean Goujon, not only heighten the effect of the

¹ Born, 1510; died, 1578.



112. Plan of the Louvre and Tuileries, distinguishing the periods at which the various parts have been complete-1.



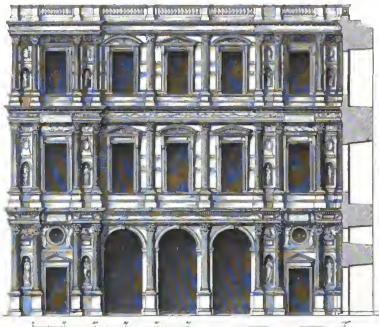
113.

Pavillon de l'Horloge and part of Louvre Court. From Rosengarten.

architecture, but are in themselves worthy of all praise. The same ordinance, in all essential particulars, has, at subsequent periods, been carried all round the court, with the important addition and improvement that, instead of the attic, a third storey, adorned with an Order, has been substituted on the three remaining sides. This not only gives greater height and dignity to the whole design, but admits of its terminating in a cornice, which is an essential element in all good designs in this school. An attic, however elegant it may be—and the French school cannot boast of one more elegant than that of the Louvre—has always more or less the appearance of an after-thought, or of a makeshift; and one of the greatest difficulties of modern Italian Architecture is how to accommodate the bedrooms and other offices without having recourse to it. When the Orders are used, an attic may, in some cases, be indispensable for utilitarian purposes; but it cannot be doubted that a building with a cornice crowning the whole is a very much better design in an architectural point of view. Although the entablature of the upper Order of the Louvre Court is only in proportion to its own height, and not a cornice proportioned to that of the whole building, its introduction adds very much to the beauty of the composition.

In comparing it with the great courtyards of the palaces of Italy or Spain, the one criticism that occurs is, that it wants light and shade. If either the lower or the upper stories had been open arcades, or if loggias had been introduced anywhere, it would have relieved a monotony which is rather strikingly apparent. Perhaps the most pleasing arrangement would have been arcades in the lower stories of two opposite sides, and an open gallery on the upper stories of the other two façades, with three open arches in the centre of the principal storey of each face. Some such arrangement as this seems, in fact, to

have formed part of the original design, and in the older works (as shown in Woodcut No. 114) it is always represented with open arcades in one or other of the stories. Considering that its dimensions are nearly 400 ft. each way, something of the sort was wanted to relieve its monotony; but even as it now is, whether we take its dimensions, or its richness of ornamentation, or the beauty or appropriateness of its design, it is certainly the most beautiful court belonging to any modern palace in Europe.



114. Part of the Court of the Louvre. From Mariette's *Architecture Française*.

If we can in fancy assume a third storey added to the courtyard of the Great Hospital at Milan (Woodcut No. 74), and its dimensions in plan increased to such an extent as to bear this without disproportion, we might have a fair means of comparing one of the best and most typical Italian examples with one of the best to be found on this side of the Alps. Of course the difference of climate accounts for the greater part of the difference in design, but not altogether. If the Milanese court consisted of three tiers of open arcades, it would fail architecturally, from want of solid parts, as much as that of the Louvre does now from the want of some open loggias or arcades to give a variety of light and shade. They are both extreme examples of their respective styles—both very beautiful—but each would have been better if it had adopted, to some extent at least, the principles of the other. If, for instance, one-third part of the arcades of the court of the Hospital had been

designed as solid, and a like proportion of the arcades of the Louvre left open, the gain in effect would have been considerable, and each of these designs would still have been appropriate to their climate and the exigencies of the case.

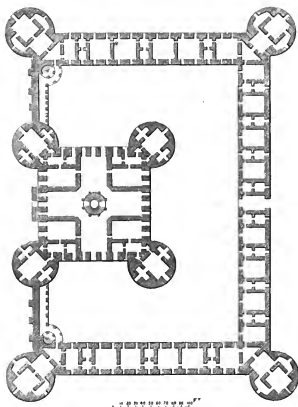
But, notwithstanding this and some other minor defects which might be pointed out, the Court of the Louvre is a wonder of elegance and good taste, as well as of exquisite proportion, especially when we consider the age in which it was executed, and has not been surpassed by anything which has been done either in France or in any other country of Europe since its time.

CHÂTEAUX.

The palace at Fontainebleau is to the reign of Francis I. what Versailles was to that of Louis XIV.—the palace of his predilections and the place on which he loved to lavish his treasures, and where he thought he was reproducing the glories of Classical Art.

In this instance there is little doubt but that Italians were mainly employed. Rossi and Primaticcio seem to have been permanently engaged; Serlio was certainly consulted, and Vignola sojourned two years in France, to assist the king in his architectural designs. But the result is curiously unlike anything Italian, or anything we should expect from these men. The plan is as irregular as anything in Gothic Art. and there is a picturesque *abandon* about the whole design which is very charming and appropriate to the situation; but, strange to say, the effect of the whole is marred by the coarseness and vulgarity of the details. There is nothing offensive or exaggerated in the use of the "Orders;" but there is not a well-proportioned column or a well-profiled cornice in the whole building. When rustication is employed, it is so used as to be unmeaning, and the window-frames throughout are very badly designed. It is difficult to understand how this could happen in a country where only recently the Flamboyant architects had almost ruined Architecture by over-delicacy and lace-like work in their details, and where the king was trying to imitate the even more elegant style of the Classical age, and under the direction of Italians, who, whatever their faults of design might be, seldom in their own country erred from coarseness or vulgarity of detail. But they fell into this error here; and, whether from intention or not, it is certain that the defects of detail mar what otherwise would be the most poetic, as it is the most picturesque, of French palaces.

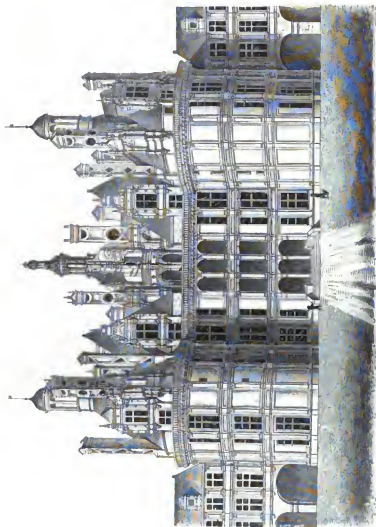
We turn almost with pleasure from the ill-understood Classicity of Fontainebleau to the thoroughly French design of Chambord, commenced by the same king in 1526, immediately on his return from his Spanish captivity. The design is so essentially French, that, although all its details are Classical, they are kept so subdued, and subordinate to the whole, that they scarcely interfere with the effect—certainly not more so than the details of St. Eustache, which leaves that still as essentially a Gothic church as this is a Gothic château of the country where it stands.



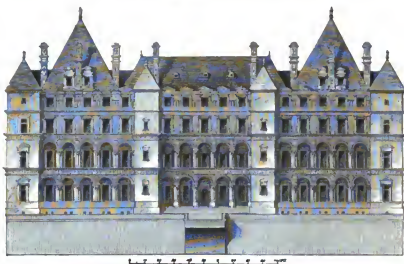
115.

Plan of Château de Chambord. From Durand.

The château itself consists of a cubical square mass, measuring 220 ft. each way, from outside to outside of the four great towers that adorn its angles. This is situated on one side of a court surrounded by buildings. These are of the same height as the central mass on that side which it occupies; on the greater part of the other three sides, only one storey in height; and at each angle there is, or rather was intended to be, a great circular tower, similar to those attached to the main building. Measuring over these, the dimensions of the building were 520 ft. by 390. The whole was surrounded by a terrace overhanging a broad and deep moat. The central building was divided into three nearly equal stories in height, but by cornices so subdued as to be little more than string courses; and the upper one projected so as to carry a balcony all round the main building. It was divided vertically into an infinite number of equal panels, by pilasters of the Corinthian order: an arrangement which would have been singularly monotonous in most buildings, but which in this instance is entirely relieved by the very varied outline of the building, and, more



Chateau of Chambord. From Rosengarten



117.

Château of Madrid. From Androuet du Cerceau.

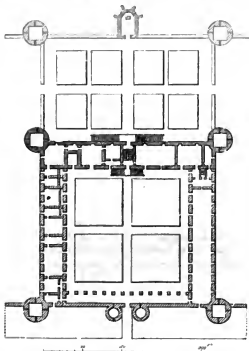
than that, by the different way in which they were treated,—many being left blank, some filled in with arcades, and many with square-headed windows,—so that few buildings possess more of that unity with variety which is so charming when properly employed in architectural composition.

The most singular and the most characteristic part of the whole design is the roof, which rises to a cone, surmounted by a cupola, over each of the towers, and in square masses over the rest. The whole is relieved by dormer windows of very elegant design, and chimneys, which are more ornamented and more ornamental than in any building erected either before or since. The whole is crowned by a central tower of domical form, but wholly of open work, containing a richly ornamented spiral staircase.

If we attempt to judge this building by the loftiest canons of architectural criticism, it would be easy to find many faults in it; but, taking it for what it is—a chateau in a flat country, meant to be seen over and to group with a park of ancient trees—as a hunting-seat of a gay Court, unconscious of any very lofty aims—it conveys an impression of truthfulness, combined with elegance, which we look for in vain in many works of more pretension of later times.

The palace or chateau of Madrid, in the Bois de Boulogne, at Paris, is another production of the same age, the loss of which is more to be regretted (it was destroyed in the Revolution) than that of any other building of its period. From the drawings of it which exist, it seems to have been of remarkably elegant design, and to have approached more nearly to the palatial requirements of the age than almost any other.

It was not very large, being only 265 ft. in length, by 112 ft. wide, but it was four stories in height, and divided into three nearly equal blocks by square towers at each of the angles, and two in each face. Standing on a good bold basement, the two lower stories were covered by arcades of very elegant design, broken only by the towers; and variety and relief were given to the whole by the centre being recessed. The roof, though high, was far from being excessive; and the chimneys were treated as an essential part of the design. If we may judge from the testimony of those who have seen it, and, more than this, from the representations that still exist, there was certainly no building for its size so palatial, or to which the Transitional style was more happily applied, though it had not the picturesqueness of Fontainebleau, nor the semi-feudal grandeur of Chambord. As an exterior, however, it would probably have at least been equal to the fragment of the Court of the Louvre, which was in course of being erected simultaneously, and almost in sight of this building; while its open arcades give it exactly that degree of shadow and relief the want of which is so much felt in the Louvre.



118.

Plan of the Château de Bury.

The buildings described above are all more or less exceptional in their arrangements; but, in the private château of Bury, near Blois, we come on a type which more or less distinguished all the signorial mansions of France, both in town and country, and even the royal palaces, when they were not on a scale too grand to admit of it. In this example, as in most others, the principal *corps de logis* (tinted darker in the plan) is opposite the entrance, looking into a square court in front, and opening in the rear upon a garden. Opposite the centre of the garden front is a chapel, which was generally omitted in future designs. At each angle is a circular tower, as at Chambord: but the circular form was found so inconvenient internally, that it was afterwards changed to a square

block, when actual fortification was no longer required, and even the suggestion of it became obsolete. On each side of the court are two long wings, containing offices and servants' apartments; and these are joined in front by a screen wall, solid externally, but covering an open arcade internally, and, in the centre of this, the *porte-cochère*, or principal entrance, on which the French architects of that and of all subsequent times have lavished all the resources of their art.

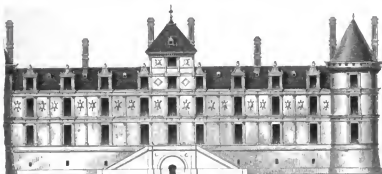
With slight modifications, this became the type of all French châteaux. Where the main building was three stories high, the wings were generally two; where the main building was only two stories in height, the wings were generally only of one, except in towns, where, for very obvious reasons, they were frequently carried as high as the rest. Where a palace was occupied by only one owner, or where it was situated in a remote or quiet part of the town, the same arrangements prevailed as in the country; but where, as is generally the case in Paris, the main building is occupied by a different family on each floor, the wings which contain the offices, &c., belonging to each suite of apartments, are necessarily as high as the rest. In towns, also, the front is generally occupied by shops on each side of the *porte-cochère*, and its situation renders it too valuable for places of business, or for another class of lodgers, not to cause it to be carried up on the side towards the street as high, or even higher, than the rest of the building.

With such modifications as these, the type of a French mansion is as fixed as that of a French cathedral; and, whether in the country or the towns, they are objects of great beauty. Their courts may want the beautiful arcades which are so graceful and so appropriate in the climate of Italy, but their designs are infinitely preferable to the cubical arrangements of English mansions.

To return, however, to the Château de Bury. Its façades are divided, like Chambord, into rectangles by small Corinthian pilasters; and these are occupied, either alternately or in groups, by square-headed windows, or by panels, with a device in the centre; and everything is balanced with so much appropriateness that the effect is as pleasing as in any design of that age. The arcade on each side of the principal entrance to the court is composed of Corinthian pilasters, with arcades between, the whole being of pleasing proportions, and elegant in their detail.

Considerable additions were made during the reign of Francis I. to the castles of Blois and Amboise. The staircase, and the wing in the centre of which it stands, at Blois, are among the most admired, or, at least, the most frequently drawn, of the works of this age. It owes its attractions, however, more to its adherence to the principles of the past than as an earnest of the future; and the building on each side of it hardly varies from what is found at Chambord and Bury.

Chenonceaux is to be admired from the extreme picturesqueness of its situation on its lake, standing principally on a bridge in the water, rather than from any excellence in the design and details; and that part of Chantilly which belongs to this period merely repeats what is so often found elsewhere.



119. Château de Bury. From Mariette, 'Arch. Fran.' Scale 50 feet to 1 inch.

The most unhappy effort of the Art of this age is the gloomy pile of St. Germain-en-Laye, almost wholly Gothic in design; the Classical features which are spread over its buttresses and arcades serving merely to deprive them of their constructive propriety of appearance, without suggesting any feeling of Classical Art. The same thing, it must be confessed, occurs rather frequently in smaller and less important examples; but, on the whole, the style of the age of Francis I. may be considered as one of the best examples of the Transition to be found anywhere. It is true it entirely misses the grandeur of the early Florentine, or the exuberance of the Venetian style, but it is always gay and elegant. Though adopting Classical details, it retains its originality, and mixes with singular felicity the picturesqueness of the Gothic with the simplicity of Classical arrangements. As a general rule, its details are marked with elegance, but with a tendency to over-elaboration, arising from the circumstance of the architect frequently encroaching on the domain of the painter, and introducing forms and details which, though beautiful as painted arabesques, are not such as should ever be carved in relief on more monumental materials.

There are in France very few municipal or civic buildings of this age. It is essentially a palace-building epoch, and churches and Hôtels de Ville are mere exceptions. One of the earliest of the latter class is that at Orleans, which was commenced at least during the fifteenth century, and offers a curious and interesting specimen of the very earliest introduction of Classic forms. It is more picturesque, however, than beautiful. All the details are elegant, and combine many of the beauties of both the parent styles; but neither used appropriately in this example, being jumbled together in most admired confusion. It is interesting, however, as exemplifying a transitional style peculiar to France. Neither in Italy nor in England is there anything similar. It could only have sprung out of the Flamboyant style, which had already squared the heads of its windows, and adopted many of the forms of the Renaissance, before it was thought necessary to carry them out with details borrowed from the Classical styles.

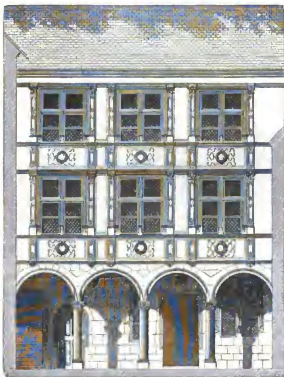
The other municipal example of this age is the well-known Hôtel de Ville of Paris, which in style far more resembles the contemporary buildings at Fontainebleau; all traces of Gothic details having disappeared from its design, and very little of the Gothic feeling remaining in its outlines. It was, however, an eminently picturesque building; and even now, though enveloped in one of the most successful designs of modern times, it holds its own without much detriment to the general effect.



120. Bay of the Episcopal Palace at Sens. From Salvagout, 'Palais, Châteaux, &c., de France.'

The thing, however, which perhaps pleases most in the Architecture of this age, is the beauty and general appropriateness of the details. Except at Fontainebleau, the Classical features, when introduced, are treated with almost Flamboyant delicacy, and men had not yet learned to think that copying the forms of one incongruous building could improve the design of another. For centuries they had been designing buildings only with reference to their purposes, and adding details

only from their appropriateness; and it requires a great deal of teaching before men can forget this, and adopt an entirely new principle of Art. Although, therefore, they might be enamoured of Classical forms, they could not at once forget that details were only a mode of expressing more strongly certain constructive or artistic forms of the building to which they were applied; and it did not then occur to the architects to use them, as was afterwards done, as extraneous adjuncts, without reference to the edifice to which they were added: in the Woodcut No. 120, for instance, representing one bay of the Archbishop's Palace at Sens; where, although all the details are Classical, or nearly so, it is impossible to say that any one is either inappropriate or mars the general design. The upper pilasters cannot be dispensed with, if the lower range is to be employed, which seems an indispensable part of the arcaded forms below; and the way in which their lines are carried through by a consolo, gives them all the continuity of a buttress, with more than its usual grace.



121.

House of Agnes Sorel at Orléans. From Verdier and Cattois.

The other example, from a façade added to a house traditionally called that of Agnes Sorel, at Orléans, exemplifies the same principle. In this instance, the arcade being supported on single columns, their

work and their design could not be well carried through by a mere ornamental pilaster. They are working members of the design, and are left to tell their own tale their own way; and to the Classical features is left the purely ornamental task of framing the windows, and relieving the monotony of the flat surface of the walls. The one thing that appears to have been omitted is a console over each pilaster to support the cornice. The frieze in consequence seems blank and unmeaning, and the design is certainly considerably marred by the want of it.

From the examples just quoted, it is evident that the French architects had quite abandoned Gothic Art as barbarous, but were at the same time embarked in the dangerous enterprise of trying to copy a style they did not understand. In the next age—that of Henry IV.—



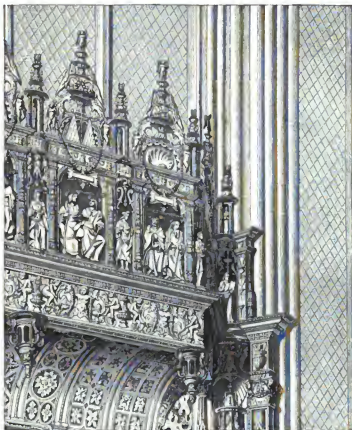
122.

Window-head, Hôtel Vogüé, Dijon. From Sauvagot.

the effect of this was painfully felt; but, generally speaking, the buildings of Francis I. are tolerably free from vagaries. The annexed Woodcut, however, from the Hôtel Vogüé at Dijon, will explain how the temptation was working. It is very rich and beautiful, and in its style hardly to be found fault with; but it is evident that, when architects adopt such forms and such details as these with the idea that they are Classical, they have dropped the bridle that ought to restrain architectural forms to their true function of expressing construction, and that only, and there is then no limit to what they may attempt, or what forms they may introduce.

This, however, is on the very limits of the style of Francis I., and can hardly be said to be a defect of his age. The defect of his buildings is the want of grandeur of conception and mass, far more than

faults of detail ; and this is probably owing more to the fact of all the buildings of his reign being palaces and châteaux of a more or less domestic character, in which it is vain to look for anything approaching to grandeur or sublimity. They only pretended to be what they were ; and though this was one of their greatest merits, the general effect was to lower the standard of architectural excellence even more than any



123. Canopy of Tomb of Cardinal Amboise at Rouen. From Rosengarten.

errors of detail could possibly have done. The true spirit of the style was perhaps best seen in France, as well as in Spain, in the shrines, tombs, altars, and smaller objects of decorative art, where the designers, being freed from all constructive necessities, could indulge their fancies without restraint. There is scarcely any important church in France where there is not to be found some richly-carved specimen of screen-work, like the tomb of the Cardinal d'Amboise

at Rouen. Frequently the details are so elegant, and the effect so rich, as almost to disarm criticism; but the result is never equal to the labour bestowed on such works; and even when merely screens, the total forgetfulness of constructive propriety generally spoils the effect, and the incongruity between the materials employed and the forms used is so apparent, that the result cannot be permanently satisfactory. These defects, however, are not nearly so apparent in screen-work as they would be in buildings of a more permanent or monumental description.

CHAPTER III.

STYLE OF HENRY IV.

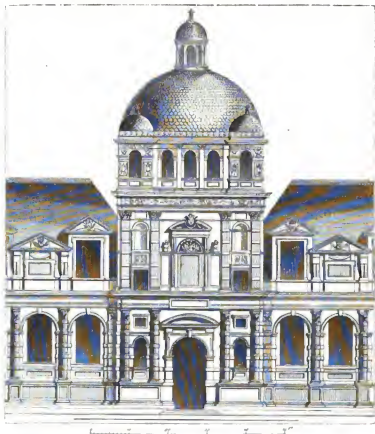
Charles IX.	1560	Henry IV.	1549
Henry III.	1574	Louis XIII.	1610

As explained above, during the reign of Francis I. the "Orders" were kept in pleasing subordination to the exigencies of the construction, and the ornaments were generally elegant and not inappropriate; but almost immediately after his death the architects seem to have thrown off all restraint. Great Corinthian pilasters sprawl through two or three stories of windows; as a general rule, a window cuts through the entablature of the Order; circular pediments alternate with triangular ones, and both are frequently broken for no object but to produce variety; rustication takes the most fantastic shapes, while griffons and monsters of all sorts appear in the place of more appropriate details. The great *débauché* of taste arrived at its culminating point in the reign of Henry IV., during which the architects seem to have fancied that perfection was to be attained by uniting the grotesque picturesqueness of the Gothic with the gigantic features with which Michael Angelo had overlaid his pseudo-Classical constructions. It was some time, however, before Architecture fell to the depths it then reached, and during the reign of Louis XIII. was gradually recovering, and forming itself into the purer style of the Grand Monarque.

The most extensive undertaking of the earlier part of this architectural epoch was the building of the Tuileries, commenced in 1564 by Catherine de Medicis, from designs by Philibert de Lorme.¹ The original plan has been preserved by Du Cerceau, and shows that it was intended to have been a rectangular block, measuring 860 ft. north and south by 550 east and west. In the centre was to have been a square court, as long, but not quite so wide, as that of the Louvre; and two smaller courts on each side, divided in the centre by galleries, enclosing smaller courts of elliptical form.

In so far as the plan is concerned, there is nothing to object to, but the whole building seems to have been designed to be only one storey in height, with an attic of gigantic dormer windows. With such lineal dimensions as those quoted above, so low a building must always have looked mean and insignificant, even when relieved by

¹ Born in Lyons; died 1578.



124. Central Pavilion of the Tuilleries, as designed by De Lorme. From Mariette.

a pavilion like that designed and executed for the centre; which is far from being commendable in its general outline or in its details. All that can be said in its favour is, that there is a general thoughtful irregularity about the design which pleases, and which characterizes an epoch, though it has little other merit.

Only the garden façade was completed by its foundress,—the courts were never even commenced; and the defects of what was completed were rendered doubly apparent by the erection, during the reign of Henry IV., of the two great unsightly pavilions (one of which is shown in Woodcut No. 126) which now bound it, designed by the architect Du Cerceau. Not only did their erection extend, to nearly 1000 ft. in length, a façade already too long for its height, but, by their mass and the largeness of their details, they crushed the prettinesses of De Lorme's design into double insignificance.

It was in order to correct these two glaring defects that Louis

Quatorze raised the whole façade between these two blocks to three stories in height, and remodelled the centre to what we now see it. It thus happens that very little of De Lorme's design remains, and nothing enabling us to judge of the effect that he intended to produce. Whatever its merits may have been, it certainly was injured by the additions of Henry, far more than it was improved by the alterations of Louis; these have, however, made it one of the most picturesque, though certainly it is far from ranking as one of the most beautiful, façades in Europe. Without the softening hand of time, and the prestige which history has given, it could hardly be spoken of in terms of sufficient reprobation as an architectural design.

Contemporaneously with the earlier building of the Tuileries, Charles IX. commenced, at a place he called Charleval, in Normandy, a palace which, if it had been completed on the scale in which it was designed, would have surpassed all the palaces then existing in France in size and stateliness of arrangement; but, in so far as we can judge from the plates of Du Cerceau, the style of the details was such that France may congratulate herself that no such monstrosity disfigures her soil. It is impossible to conceive anything more fantastic or vulgar; and how French taste could ever have sunk so low as to admire this, it is difficult to conceive.

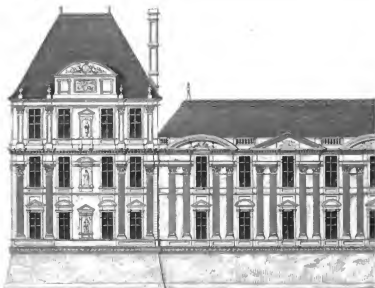
One specimen (Woodcut No. 125) must suffice to illustrate the style, though unfortunately the examples are only too common, and not only rival but surpass the absurdities of the Jacobean age in our own country. It is taken from the Château Gaillon, a building of the latest Gothic age, but which was added to and beautified

at this period in the style then fashionable. At the present day we can hardly understand how architects could desert the constructive propriety and elegance of detail of the middle ages for such a style as this; still less how they could fancy they were reproducing Classic Art when they did so. But it was so, for nearly all the most admired buildings of this age were decorated with details as bad as this, if not worse.

Besides the two pavilions called De Flore and Marsan, which Henry IV. added to the façade of the Tuileries, he commenced in the



125. Portion of the Façade of the Château Gaillon. From Du Cerceau.



126. Pavillon Flore of the Tuileries, and part of the Gallery of the Louvre. From Mariette.
Scale 50 feet to 1 inch.

same style the great gallery that connects the Louvre and the Tuileries, and which may be taken as a fair specimen of the best Architecture of his day. Its general character will be understood from Woodcut No. 126, representing the pavilion at its junction with the Tuileries, and the position of the galleries adjoining it. It is adorned with great Corinthian pilasters, 40 ft. in height, which have no reference either to the structure externally, or to the arrangements of the interior. As usual also, the entablature is cut through by the windows; and a series of pediments, alternately semicircular and straight-lined, give a broken line, which aggravates instead of mitigating the overpowering heaviness of the roof. The architects seem to have proceeded on the idea that largeness of details would give size and dignity to a building; whereas, had they cast their eye on any Gothic structure, they would have seen that the truth lay exactly in the opposite direction, and that smallness of parts and details, combined with simplicity of arrangement and of mass, are the true secrets by which the effect they were aiming at could alone be obtained.

It is with pleasure we pass on from these aberrations of Du Cerceau and Duperrae to the return of soberer taste which marks the designs of Lemercier;¹ for though little remains of what he erected at the Palais Royal, we have, at the Sorbonne and elsewhere, the germs of that style which characterized the following epoch.

Perhaps the most satisfactory building of this age is the palace of the Luxembourg, commenced shortly after 1611, by De Brosse, for

¹ Born at Pontoise; died 1660.

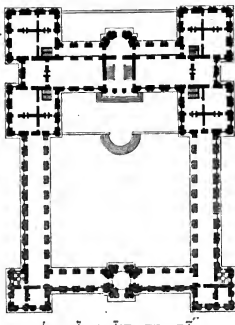
Marie de Medicis. It is so sober that one would be startled to find it belonging to that date, if it were not that it was built for a Medici, who insisted that the Pitti and other palaces of her beloved Florence should form the key-note of the design.

In plan it is essentially French, consisting of a magnificent *corps de logis*—shaded darker in the plan—315 ft. in width by 170 in depth, and three stories in height, from which wings project 230 ft., enclosing a courtyard, with the usual screen and entrance tower in front.

The greatest defect of the design is the monotony of rustication which is spread over the whole, from the basement to the attie, and covering the pillars as well as the plain surfaces. It is true it is not used here with the vulgarity which

so frequently characterizes the rustication of the previous reign, but with something of Italian elegance; and the architect has taken great pains, by the boldness of his masses and the variety of light and shade he has introduced everywhere, to justify its employment, and has sought to relieve the monotony of detail by the variety of outline. He has done this with such success that even now there are few palaces in France which on the whole are so satisfactory, and so little open to adverse criticism, as this one is.

In Louis Philippe's time a large addition was made to the main *corps de logis* of this palace, in order to fit it for the reception of the Chamber of Peers. With great good taste the new part was made exactly similar to the old, but the effect has been, by increasing its breadth, to make the whole design more squat than it originally was, and to increase the lowness, which is really its principal defect. This effect, too, has become more apparent in modern times, by the increased and increasing height of the new buildings of Paris. Even now it would not be so apparent if the whole building had been crowned by a cornicione. When the principal feature is at the top, the eye is carried at once to the highest point, and the design gets the full benefit of all the height it has; but when the principal feature is one-third of the



127. Plan of the Luxembourg. From Mariette.



128.

Elevation of a portion of the Courtyard of the Luxembourg.

way down, all there is above counts for but little in the general design.

It is surprising that Marie de Medicis did not insist on the introduction of this great characteristic of Florentine design. Even if she did so, the taste of the French architects would probably have been too powerful for her; for throughout the whole range of French Architecture there is scarcely a single example of a façade with a well-profiled or well-proportioned cornice; and in nine cases out of ten there is some sort of attic above the cornice. Where it does crown the building—except in such absolutely Classical designs as the Madeleine, for instance—it is proportioned only to the Order, not to the whole elevation, and consequently is never integrally a part of the entire design.

It would be well if this were the only, or the greatest defect that could be pointed out in the Architecture of the age. It is unfortunately one of the most venial; the real deficiency of the style being, that the details introduced are seldom elegant, and are generally gross and grotesque. They neither aid nor express the construction, and the whole designs are as far removed from the constructive propriety of the Gothic as they are from the elegance and grandeur of the Classic styles which the architects so strangely thought they were reproducing.

CHAPTER IV.

STYLE OF LOUIS XIV.

Louis XIV. . . . 1643. Louis XV. . . . 1715. Louis XVI. . . . 1774.

So soon as the French architects of the early part of the seventeenth century had time to compare their performances with those of other countries, it was almost impossible they should fail to perceive that they had not hit on the right path in their endeavours to endow their country with a new style. Their works had neither the original nationality of those of the reign of Francis I., nor had they the elegant classicality which had been attained in Italy in the works of Palladio, and others of his school. It was consequently open to them either to go back to the point where the style had been left half a century earlier, and to try and recreate a national style, or to adopt the principles so successfully carried out in Italy.

Knowing how essentially the tendencies of that age were towards Classical forms, not only in learning and in literature, but in Art also, it is easy to surmise that the architects of the day would adopt the same principles which had been introduced into Italy, and that, during the reign of the Grand Monarque, the style which was then assumed to represent the Architecture of Imperial Rome would become the prevailing fashion.

At the present day we are so fully imbued with the love of the picturesque, and admiration for everything that even savours of Mediævalism, that it is difficult for us to understand how the architects of the age of Louis Quatorze could forsake the picturesque style of Francis I., to adopt the cold, formal arrangements of their day. When, however, we place the buildings of the two ages in immediate juxtaposition, as we are able to do in such an example as the view of Blois (Woodcut No. 129), we see at once what the architects were aiming at, and why they took the means they did to arrive at it. Though the new part may now appear to us cold and formal, there is a largeness about the windows which betokens a well-lighted interior, a height between the floors indicating spaciousness in the apartments, and a general simplicity and elegance of design which, especially when new, must have produced a most pleasing effect. However picturesque the earlier buildings might be, the stories were low, the windows small, and anything like stateliness or grandeur inside was impossible. It must also be borne in mind that it is the inside of the house or

palace which is important; and, consequently, when stateliness and grandeur were aimed at, larger and more regular designs were indispensable.



129. Part of the Château de Blois. From Laborde, 'Monuments de la France.'

To this must be added the greater familiarity with, and increased admiration for, the literary works of the Classic ages; and the consequent desire to rival by copying them which pervades the literature even more than it does the Art of this age. It requires only the most superficial knowledge of the works of Corneille, Racine, Boileau, and the other great writers of that day, to be aware how essential it was assumed to be to copy literally the forms of Classic literature; and the general idea of reproducing Rome seems to have pervaded every utterance of the people; but the success of the attempt was nearly alike in all cases. Racine did not become Euripides, Boileau did not rival Horace, nor Louis the Grand either Julius Cæsar or Augustus; nor did the architects of this age do more than masquerade in the flimsiest and most transparent shreds of Classical disguise.

In the example of Blois we know now that the imitation is not perfect; but *they* did not then know it; they believed that they had beaten

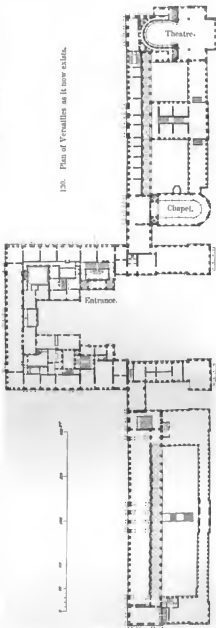
Vitruvius, and rivalled the best productions of the Augustan age, and the French architects have consequently proceeded boldly from the design of the Tuileries to that of Versailles, from Versailles to the Louvre façades, and from that to the Bourne and the Madeleine; and being unable to go further in that direction, the pendulum is now swinging backward towards—what?

VERSAILLES.

The great apostles of this new revival were the two Mansards—uncle and nephew—Italians by descent, but neither of them men at all equal to the opportunities which were thrown in their way. Had the younger, Jules Hardouin,¹ been a man with one spark of creative power—one ray of genius—he might have produced such works as would have made an epoch in the art; as it is, the elder invented the ugly style of roof which bears his name, and the other, at Versailles, stamped mediocrity and almost meanness on the largest and most gorgeous palace of Europe.

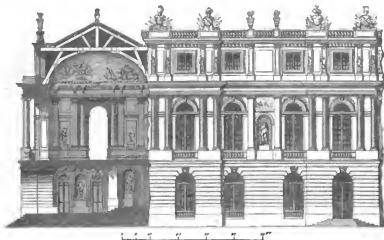
It is generally attempted to excuse Mansard's failure at Versailles by referring to the difficulties he had to contend with: first, in having to include in his design the old hunting-seat of Louis XIII., which his son and successor would not permit to be destroyed. If any

130. Plan of Versailles as it now exists.



¹ Jules Hardouin Mansard, born 1647; died 1708.

estimate of the merit of the design were to be made from the appearance of the entrance front, this excuse would be just; but this is not the case here, as the front is so broken up and composed of so many small incongruous parts, that it is never taken into account in speaking of the architectural design of this palace. The old château is a small brick building, with stone dressings, in the quaint style of the preceding reign. As a hunting-box of a king, it is as interesting as any portrait in the *grandes perruques* and voluminous costumes of the age; but is so unworthy of its site as quite to take the entrance front of the palace out of the category of an Art design.



131.

Section of Great Gallery and part Elevation of central block, Versailles.

It may also be said that the design of the new palace is due in some respects to Leveau, who had charge of the works from their commencement, in 1664, till his death, in 1670. So far, however, as can now be made out, his labours were chiefly confined to the repair and adornment of the old château, so as to fit it for the residence of the king, with such additions as were requisite for the increased splendour of the court. But the garden front, which is really the palace, in so far as Architecture is concerned, seems to be wholly of Mansard's design, and was practically completed by him from his own designs about the year 1685. The central part had, it seems, been occupied by the king and the court from the year 1681.

The situation of the palace is as favourable as can well be conceived. It stands on a rising ground, so that you ascend towards it from whatever side you approach it, and still, so gently as nowhere to necessitate any change in the design to suit the locality. It is true the terraces of the garden are so arranged as to hide the palace the moment you descend the steps in front, and, so far from adding to the height or giving dignity to the mass, they rather detract from it; but this is

the fault of the architect, or of Le Notre, who laid out the garden. By making the terraces narrower, and breaking them so as to follow the lines of the building, they might have been made to give it that elevation and dignity which it now so much wants. The ground was admirably adapted for this; it consequently is a very serious reproach to those who had charge of the design that they did not know how to profit by it.

The dimensions of this palace are probably unsurpassed by those of any in ancient or modern times. The central projection measures 320 ft., and each wing about 500, so that its length is 1320 ft. in a straight line north and south. As the central block projects forward 280 ft. in front of the wings, the whole façade really measures 1880 ft. It is this projection which alone saves it from being as undignified a Terrace as exists in any town in Europe. There being no variety in the design, and nothing to compare it with or give a scale, it looks like an ordinary row of street houses three stories in height. Only with considerable difficulty, and after a great deal of thought, can it be ascertained that it is larger and taller than any ordinary mansion, and is, in fact, a palace of colossal dimensions. The lower storey is rusticated throughout, and pierced with circular-headed openings of one design, and of one dimension, whether they are used as windows of bedrooms, or carriage entrances through the building, to both which purposes they are here applied. The principal storey is adorned with an Order, used sometimes as pilasters, at others as columns standing free; but the pillars are so widely spaced as at a distance to give the idea that, if the architrave is of one stone, they must necessarily be very small; and on a nearer approach, when you see that each is composed of a number of small pieces cramped together, the whole has an appearance of meanness most unworthy of the situation. Over this is an attic which ends in nothing. Had it borne a deep cornicione, it would have gone far to redeem the whole. But there are fifty ways in which the design might have been saved. Any bold projection on the angles, any towers or domes to break the sky-line, any variety in the wings to give scale, would have effected this; but the flat monotony of design in such a building is the greatest architectural crime of modern times.

Internally, the design is as objectionable as that of the exterior. The entrance is mean; there is no portico, no grand hall, no staircase worthy of such a palace, no vestibule, or any arrangement that would impart either dignity or poetry to the whole. So much is this the case, that very few persons are probably aware where the principal entrance really was, and fewer would believe if told that it was only an insignificant doorway on the right-hand side of the Cour Royale, near the principal staircase.

The Grand Gallery, with the square vestibules at either end, extending along the whole of the centre of the garden front (320 ft.), is certainly one of the most gorgeous apartments in Europe—rich in marbles and in decorations; but it is only a gallery 35 ft. wide and 40 ft. high, and is not a hall or a room with any point of interest in it. Architecturally, it is a passage that ought to lead to some more

splendid apartment; it is without a vestibule or staircase leading to it, and it leads to nothing.

All, perhaps, that can be said in favour of the design is that, though it is commonplace, there is in it no glaring offence against good taste; and no part of it can be said to be a sham, or to pretend to be other than it really is. Rustication is only used in the basement; the Order is well profiled, and never runs through two stories, or where it might not be legitimately used; and the attic is such as might be indispensable in such a palace. It was, however, a strange perversion of Architectural propriety, in order to make the centre uniform with the wings, to carry the glazed attic over the Order along the central part of the garden front, where the great gallery occupies the whole height above the basement. Had an Order 40 ft. in height been introduced here, it would only have correctly expressed the internal arrangement (Woodcut No. 131), and would have been just what was wanted to give this part the dignity it lacks. The most ordinary fault of architects of the present day is that they attempt to make buildings of three or four stories in height look as if they were only two or three; but both at St. Peter's at Rome, and at Versailles, the fault has been, throwing away the dignity obtained from singleness and largeness of parts, to make the building look as if it was composed of a larger number of small apartments. Of the two faults, the latter is the greater. To aim at grandeur, even if not quite legitimate, is far nobler than to court littleness where grandeur really exists.

This uniformity, more than any real defect of design, destroys the effect of the façade at Versailles. It is impossible to believe that all the 1800 ft. of frontage are alike taken up with stately galleries and apartments; and the mind feels almost instinctively inclined to adopt the opposite scale of all the rooms being small, and is justified in so doing, as the architect has himself chosen the meaner instead of the grander scale as the key-note of his design. By repeating the same features over and over again throughout a façade twenty times the length of its height, he has gratuitously used all the resources of his art to make that look mean and insignificant which is in reality grand and magnificent.

LOUVRE.

The completion of the Louvre was the next greatest undertaking of the reign of Louis, but carried out under happier auspices than prevailed at Versailles. It seems that François Mansard was first applied to by Colbert, but, refusing to accede to his terms, Bernini was sent for from Rome. His designs have been preserved, but, most fortunately, not executed; and France may congratulate herself that nothing so horrible was perpetrated. Had they been carried out, instead of possessing one of the most beautiful, she would have had only one of the most vulgar and least artistic palaces of Europe. Marot and Lemercier also presented designs, which, though certainly less objectionable than Bernini's, only tend to show with how much

justice that of Perrault¹ was preferred before those of all the other competitors.

Although brought up as a medical man, Perrault seems to have had an intuitive taste for Art, not only beyond that of his contemporary architects, but also beyond the age in which he lived; for no design of that day can at all compete with the eastern façade of the Louvre in true appreciation of the exigencies of Classical Art. It is unfortunate, however, in being turned towards the east, where the sun only reaches it in the morning, and where there is not space enough to allow of its being properly seen. It ought to have faced the south, and been the principal façade towards the river, instead of the very tame and commonplace design which now occupies that position.

At the present day, when we are so much more familiar with the examples of Classic Art, and with the principles on which they were designed, than any one could be two centuries ago, it is easy to point out defects in the Louvre façade. The basement is not bold enough for its position; it ought either to have been rusticated, or the openings more deeply recessed. There is nothing in it to suggest the intention that a colonnade of so bold a character should stand upon it, and nothing that connects it in any way with the superstructure. Its great defect, however, is that it entirely hides the lower part of the wall at its back. In the upper storey the columns are avowedly merely an architectural screen; the wall behind them is the main wall of the building. In the basement storey the front wall becomes the principal one, and the other seems to run down through the centre of the room below, in some uncomfortable manner, which cannot be guessed at from the outside. This is about as great a mistake as could well be made—one of the first rules of the art being, that whatever is not seen must be accounted for; it ought either to be brought down to the ground, or some device shown by which it can be made to stand. Here the main wall is lost; perhaps it may be only lath and plaster, and stand on the floor,—or it may be supported on a glass case, like a London shop-front,—at all events, there is nothing shown which satisfies the mind that the building is truly and honestly constructed, and the effect is unsatisfactory in consequence.

The upper part of the central mass not being recessed, is another mistake, which detracts seriously from the beauty of the design, and renders the pediment that surmounts it, if not ridiculous, at least unmeaning and uncalled for; and the manner in which the circular head of the principal portal rises above the bases of the columns, cuts up the composition, and throws an air of falsehood over the whole. Instead of introducing masses of masonry behind the central columns, they ought to have been doubled—quadrupled—for real architectural effect, carried almost through the building—in order to justify the colonnades on either flank, which, without some such arrangement, are unmeaning, though beautiful. The design would also have been probably better, if, instead of coupling the pillars, they had been

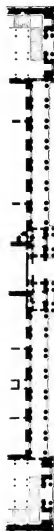
¹ Born 1613; died 1688.

equally spaced. For this, however, the reason was obvious: it was to free the fronts of the windows, which occur only between the larger openings. One other defect, though it is one the architect was not responsible for, is that the façade is too long for its height, being



Eastern Façade of the Louvre, Paris. Scale 100 feet to 1 inch.

132.

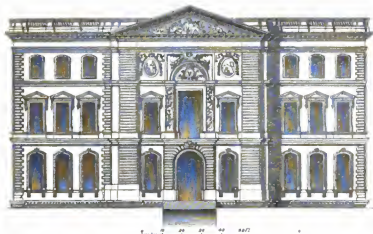


Plan of Façade of Louvre. Scale 100 feet to 1 inch.

133.

565 ft. long, and only 95 ft. high to the top of the balustrade. The solid masses at the angles break this to some extent, and a bolder projection or deeper recess in the centre would have done more; but what really was wanted was some tower-like masses to break the sky-line, and to

give that height which is so indispensable for dignity in such a situation. Its greatest defect, however, is that we cannot help feeling, in spite of its many beauties, that it is, after all, only an architectural screen—a something put there, not because it was wanted, or because it was essential to the design of the building, but in order to suggest something that had no reference to the purposes of the Louvre, or of the age in which it was erected; notwithstanding this, however, it has not been surpassed in modern times, either for elegance or propriety.



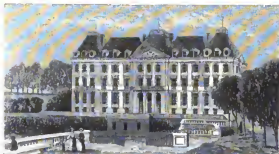
134.

Central Compartment, Northern Façade of Louvre.

Taking it all in all, perhaps the north front is the most satisfactory of the three outer façades. It is singularly plain, having originally stood in a narrow street, where it could hardly be seen at all, and having practically no ornament but rusticated quoins at the angles, and a happy disposition of the windows and openings throughout. Yet, with these slight and inexpensive adjuncts, it is both pleasing and satisfactory; and, with a little more ornament bestowed on the same parts, it might rival the eastern nearly to the extent to which that surpasses the southern façade.

Mansard designed and erected the Palace at Meudon very much in the same style as the northern façade of the Louvre. On the front it is only two stories in height, and is not quite satisfactory; but on the other side, where the ground falls to such an extent as to allow of four stories, very considerable dignity is attained; and, being without any pillars or pilasters, it avoids all those shams which so often disfigure the designs of the age. It is impossible to study this building and the northern façade of the Louvre without feeling that this was the true style of the age; which if the architects had only persevered in cultivating, they might have produced something as beautiful as it was appropriate; the one great reform wanted being that, instead of

carrying rustication on the angles up to the cornice, and repeating it everywhere, they should have substituted square piers of equal boldness, and panelled them. This would have relieved their rudeness, which we cannot help feeling is not quite appropriate to palace architecture. The principal defect in the design is that the cornice at the top belongs to an Order which appears in the upper or two-storied façade, and is consequently not of sufficient importance for another of twice its height; but this unfortunately is one of those consequences it

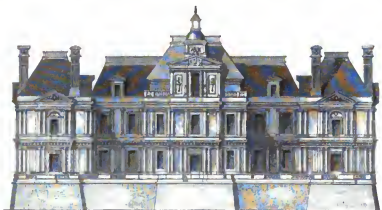


125.

Château de Meudon, Garden Front.

is so difficult to avoid when Orders are employed in modern buildings at all; and neither the Louvre, nor indeed any French building of this age, is entirely free from what may be considered as an inherent defect in the style.

The Château of Maisons, built by François Mansard about the year 1658, is one of those happy designs which would seem naturally to have linked together the style of Francis I. with that of Louis XIV., had not the nightmare style of Henry IV. intervened. As it is, it is almost as Classical in its details as the works of his nephew. It com-



126.

Château de Maisons near Paris.

bines the playfulness of outline which prevailed at an earlier age with a strict adherence to the proprieties of the Orders as then understood. The roof is enormous, but relieved by the chimneys, and by being broken into masses; while the whole effect of the design is that it is the house of a nobleman, of singular elegance, neither affecting templar grandeur nor descending into littlenesses. The great defect of the designs of Versailles and the Louvre is their want of variety, especially in their sky-line, and that is happily avoided here, and in a manner that was seldom more successful in this age.

HOTELS.

There were scarcely any of the great families of France who, during the age of Louis Quatorze, did not rebuild their hotels in the capital, on a scale befitting what was then the proudest aristocracy of Europe, and in a style of magnificence commensurate with the splendour of the court to which they were attached.

Many of these hotels have been destroyed, and some converted into Government offices, or applied to meaner purposes; but still many remain, and all possess a strongly-marked individuality of character, and a largeness, almost sternness, of design, in strong contrast with the gaiety of their interiors.

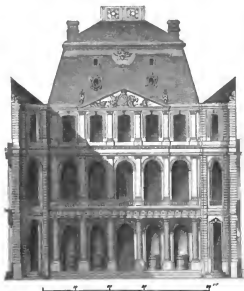
These palatial residences of the nobles of France are far from impressing the stranger in Paris with the same sense of magnificence as he receives from those of Italy and other countries. In Florence, Rome, or Venice, the street front is almost invariably the largest, and the most richly decorated of the whole building; but in almost every case in Paris, there is only, towards the street, a high dead wall, divided into compartments by rusticated piers, with a panel between each, and in the centre a *porte-cochère* of more or less magnificence. It is only by entering or looking through this opening that we become aware that a palace is situated within; and even then, in nine cases out of ten, it is not the entrance front that is either the most beautiful or the most richly adorned, but the one facing the garden, which is an almost indispensable adjunct to a Parisian hotel.



As a general rule, the Parisian architects of this age use the Orders very sparingly in these hotels—with good taste employing them only in the centres, where a porch or projection of some sort is almost indispensable; and if they go further, the additional pillars or pilasters seem to be suggested by those which were introduced by necessity.

Among the most elegant of the palaces of this class are the Hotels of Soubise and De Rehan, both built by Lemaire, and very similar, except that the former is two, the latter three stories in height. Both are characterized by the usual faults and beauties of the style—a sober and elegant employment of the Orders, less frequently as mere ornaments; and a forced regularity, making carriage-entrances and saloon windows exactly similar in design.

The Hôtel de Noailles, erected from the design of Jean Marot, is another pleasing example of a three-storied building of the age, and, though exhibiting no remarkable excellence of design, is sufficiently dignified and palatial for its purposes. Like the Hôtel Soubise, it may be taken as a type of a great many buildings of the same class, which were erected in Paris about this time. Others, such as that of the Duc du Maine, are entirely without pillars, which is perhaps the more usual arrangement; but even here the cornices are all profiled, as if the Classical Orders had been intended somewhere, and it was thought necessary to adhere to their proportions. As before



138.

Hôtel de Noailles. From Mariette.

remarked, indeed, one of the great deficiencies of this style is that nowhere was a cornice introduced with a projection proportioned to the whole height of the building—a feature which gives such dignity to those of the earlier Italian period, and which, in Venice especially, is frequently introduced, even where the whole building is covered with pillars or pilasters proportioned to each individual storey only.

Another defect, which is very apparent to those who are familiar with Italian or English buildings, is the immense size and frequency of the openings, leaving very little plain wall anywhere; and as the carpentry of the windows is generally clumsy, and the glass bad, this

conveys a certain air of meanness, besides detracting from that repose and solidity which is so essential where anything like dignity is to be attained in Architectural Art.

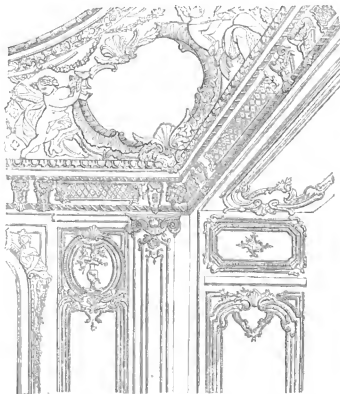
This was carried to an extent not found anywhere else, in such buildings as the Trianon at Versailles and the Palais Bourbon in Paris. Both are one-storied buildings in all their principal parts, and, with their large openings, are only suited to the peculiar climate, and still more peculiar practice of living in public which exists only in France, or where French manners and customs have been copied.

The Great Trianon was built by Louis XIV. for Madame de Maintenon, from designs by Mansard. The centre is one grand gallery open on both sides, and, excepting that it has an opaque roof, looks more suited for a conservatory for plants than a royal residence. The wings on either hand, of exactly similar design, contain the living and sleeping apartments of the palace. Though rich in marbles and in decorations of every sort, the sameness throughout produces an unmeaning monotony that nothing can relieve.

The Palais Bourbon, executed from the designs of Girardini in 1722, is better. There is some variety in the parts, but on the other hand there is a littleness in the details which betrays the commencement of the transition which was to connect the grandeur of the style of Louis XIV. with the prettiness of the present day. The dimensions, too, of the Palais Bourbon are small, and, as a town residence surrounded by other buildings, it may almost be termed insignificant, a term which, whatever their other faults may be, can hardly ever be applied to any building erected by the Grand Monarque or the nobles of his court.

It is to Jules Hardouin Mansard that we principally owe an invention which has had a wonderful influence on the architecture of cities since his time. Having at Versailles reduced the architecture of a palace to that of a street, he next tried to elevate the architecture of a street to that of a palace. The two most notable examples of this are the Place des Victoires and the Place Vendôme at Paris. In both these instances a number of smaller buildings and private houses are grouped together in one design, so as to look externally and at first sight as one great building. The peculiar arrangement of Parisian houses, which have only one entrance for several residences, and that by a large *porte-cochère*, is peculiarly favourable to this species of deception; but after all it is only a trick, and one which never has been successful. The Place Vendôme is one of the best examples of this mode of grouping to be found anywhere, but fortunately it did not find favour in the eyes of the French architects, and after the age of Louis XIV. has scarcely ever been again attempted in any town of France; but it was so suited to save trouble to an architect, and to the peculiarly small character of our independent residences, that it was considered a great discovery in this country, and almost every town in England has suffered more or less from its adoption.

A more successful as well as more legitimate attempt of the same



139.

Louis Quatorze style of Decoration. From Versailles.

sort was made by Gabriel,¹ under the following reign, in the two blocks of buildings which form the Place Louis XV., facing the Place de la Concorde. In making this design, it is evident that Gabriel was attempting to rival the famous colonnade which Perrault added to the Louvre, and in fact he has remedied several of its defects. His basement is much better designed, for here the main wall is seen coming down to the ground, while in the Louvre it is impossible to know what becomes of it. The coupling of the pillars is avoided, and, the whole being divided into two distinct masses, the proportion of height to width is better. On the other hand, there are two stories of windows under the colonnade, and the suspicion of a third above it. The pillars are too tall, the profiles deficient in boldness, and the scale is so much smaller, that in these respects it will not stand comparison with the Louvre. The height of the Louvre façade is 95 feet, that of the Place Louis XV. only 72; and the latter, being situated at the end

¹ Born 1710; died 1782.

of one of the largest Places in Europe, should have been designed on a much larger scale in order to have looked of the same size as one placed in so confined a space as the Louvre. They are not therefore fair rivals, though the work of Gabriel may fairly be classed as one of the most successful specimens of "terrace" architecture which has yet been executed, but has no real claim to belong to a higher class.

The true originality of the Architecture of the age is to be found not so much in the exterior as in the interior of the palaces which were then built. Although, in consequence of the exterior of their houses being so little seen, the nobles of France hardly cared to spend either much money or pains on their designs, it was very different with the interiors; and they vied with one another in the magnificence of their suites of public rooms, and the splendour with which they were decorated. In some of the largest halls and vestibules, or in such galleries as those at Versailles, the Orders were introduced,—generally Corinthian,—with marble shafts and bronze capitals; but far more generally, and always in the smaller rooms, the decorations are in the style known as "Louis Quatorze," or Rococo.

Now that this fashion has passed away, it is impossible not to condemn the style and to regret its introduction. It is unconstructive, and neither seems to grow out of any constructive necessity nor to suggest one. The lines and curves are confused, proceeding on no system, and are such as can be produced by an intelligent plasterer as well as by a first-rate artist. No genius could ennoble and no taste refine it. Still it has the great and unique merit of being a *style*, and the only thing approaching to one that has been invented since the Renaissance.

It is impossible to enter one of the saloons of this age without feeling that both thought and ingenuity have been applied to it for a definite purpose; and that unity and harmony have resulted, accompanied generally by brilliancy and splendour, almost sufficient to claim forgiveness for the bad taste too often displayed.

In modern drawing-rooms we often find, for instance, that the plaster-work and chimney-piers may be pure Grecian; the paper covered with fleurs-de-lys of the most Mediaeval pattern; the pier-glasses and console tables, Louis Quatorze; the carpet, nature gone mad; and the furniture with as much unity of design as may be apparent in a pawnbroker's shop. Anything is better than this; and it is a great merit in the architects of the age of Louis Quatorze that they did not think their task finished when the last slate was put on the roof, but really applied themselves to what, after all, must be the most important part of a dwelling-house, and designed the arrangement and decoration of



140. Louis Quatorze Decoration.

the living-rooms with more care than they applied to the exterior. In these interiors we find the ceiling and cornice of the same pattern as the walls; they are carefully divided into panels, and each partition has a pier-glass, or a picture painted for the place, or an opening which fits it; and the chimney-pieces and all the furniture are parts of the same design. When this is the case it would be difficult indeed to go wrong; and even when we cannot help admitting that they did go wrong, it is still a relief, in the weary waste of modern copyism, to find one instance in which the talents of the architects have been exerted so much in this direction, and to feel that, if exerted in the right manner, they certainly would have produced something of elegance and beauty. Had the influence of the age been higher and less frivolous, or had their energies been directed to a nobler purpose than the decoration of the *salon* of a French lady of fashion of the age of Louis Quatorze, the merit of having invented a new style might have been awarded to them, as well as that of being the regenerators of Architectural Art in Europe.

CHAPTER V.

STYLE OF THE EMPIRE.

Napoleon, First Consul	1800	Louis Philippe	1830
Louis XVIII.	1815	Napoleon III.	1845
Charles X.	1824		

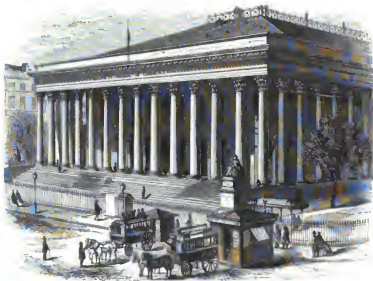
THE latter half of the eighteenth century was not favourable for the production of works of a palatial class. A few public buildings were carried on, such as the Pantheon, the completion of St. Sulpice, and the building of the Place Louis XV., but national prosperity had received a shock, and the gathering of the tempest which burst with such violence in the last decade of the century had disinclined the public from such permanent investments as building always must be.

When, with returning prosperity, under the Empire, public works on a large scale again became a necessity, it is curious to observe how completely the style had changed. The pure Classic, of which David was the apostle in Painting, and Canova in Sculpture, had also taken possession of Architecture. From the chief of the state to the chiffonier in the street, every one tried to believe, or to encourage the belief, that the Empire of France was the legitimate successor, or a reproduction of that of Rome; and all things which were neither real nor essential were made to conform to the delusion.

One of the most important undertakings of this class in Paris was the remodelling of the Palais Bourbon, to adapt it for the purposes of the Corps Législatif. The property had been confiscated during the Revolution, and used for the sittings of the Council of Five Hundred, but was now to be adapted for a smaller and less turbulent assembly. The execution of this project was confided to Poyet, who, in 1807, commenced the façade opposite the Place de la Concorde. As it is one of the most correct reproductions which have been executed in modern times of the forms and arrangements of a very beautiful style of Architecture, it can hardly fail to be pleasing; and is in fact one of the most important monuments of the capital. Its great defect is one that it has in common with all reproductions of its class—that it is inappropriate, and does not tell its own story. Were it the façade of a Museum of Ancient Sculpture, it might be considered as doing so; but for any other purpose it only appears as a screen to hide something modern and useful; and of which, consequently, its designers were ashamed. The five small doors under the portico can hardly be designed to open into a hall the whole height of the screen, and the two windows—one on each side—evidently only belong to the base-

ment storey. How, then, is the rest lighted?—and to what purpose is it applied? Were it the back of an imperial racquet-court, it would be perfect; but if intended as anything else, it is a sham.

As the old pavilion of the Palais Bourbon still stands beside this, it is curious to observe the change that had taken place in design between the two ages to which they belong. As remarked above, the buildings of the age of Louis XIV. generally fail from being too light—being, in fact, all window. Those of the early part of this century, or of the Empire, pride themselves on having no windows at all; and the chief merit of this design and of the Pantheon is to puzzle the spectator as to how daylight is to be admitted. The greatest architect was he who contrived to conceal best what really was the most essential part of his design.



141.

View of the Bourse, Paris. From a Photograph.

The Bourse, which was the next great building in this style, is not entitled to even this modicum of praise; for there nothing is concealed except the central hall, which, however, is the one thing which ought to be shown. The principal feature in this building is a great rectangular hall, 60 ft. by 110, with a corridor in two stories all round it, and lighted from the roof; and which might easily have been made a principal and appropriate feature in the design, as is the case in the Exchange in St. Petersburg, which is in consequence a far more truthful and satisfactory building than this. As it is, the building is merely a rectangular palace. It is 234 ft. in length by 161 in width, measured over the bases of the columns, and these are each 40 ft. in height. Two of the stories of windows are shown beneath the colon-

made, the third partly concealed by its balustrade at the top; but the existence of the attic prevents the roof having any connexion with the peristyle, and, as the proportions of the building approach much more nearly to a square than they ought, the roof is far too heavy and important for the rest of the edifice. Notwithstanding all this, a peristyle of sixty-six well-proportioned Corinthian columns (twenty on each flank and fourteen on each front, counting the angle pillars both ways) cannot fail to produce a certain effect; but far more might have been produced by a less expenditure of means; and a different treatment was necessary in a situation like that of the Bourse, which stands in a small square, surrounded by tall houses, where, consequently, height and mass were indispensable. As before remarked, this last defect is nearly as apparent in the Madeleine—the other great peristylar building of the age. That church, however, is in reality only one great hall, requiring, as may be supposed, no windows at the side; and, in addition to this, the proportions of length to breadth in the Madeleine are much more pleasing, and the roof is not only a part, but, with its pediment, a most important and beautiful part, of the whole design.

If, therefore, it is determined that we must copy buildings of this class, the Madeleine may be considered a success, but the Bourse a failure, not only in consequence of the ill-adjusted proportions of its parts, but also because of the utter want of meaning of a peristylar arrangement as applied to such an erection.

This purely Classical, or, as it is sometimes called, Academic style, took no permanent root in France; and in all the recent buildings, though more numerous and more expensive than those erected in France in a like time at any period of her history, no attempt has been made to reproduce it. It never did extend to Domestic or Street Architecture. On the contrary, nothing is so creditable to the French architects as the truthfulness and elegance with which they have elevated domestic structures within the domain of Fine Art. It is true the circumstances were extremely favourable to the attempt. The mode of living in apartments one over the other, instead of in houses side by side, as in this country, enabled them to obtain masses of building palatial in scale, and this, with their requiring only one entrance, generally in the centre, were all circumstances very much in their favour. Add to this the facility with which the Paris building-stones can be carved and worked into ornaments of every class, together with the number of skilled workmen capable of executing any design at a moderate cost, and it will be easily understood what facilities they possessed over the architects of other countries. They have availed themselves, however, of all this to an extent, and with an ability, that the architects of other countries have seldom shown themselves capable of; and the consequence is that the Street Architecture of Paris is unsurpassed by anything in Europe. There are, of course, great inequalities of design, as there must be where so much variety exists. In some instances the old disease of pilasters breaks out with an unmeaningness worthy of the age of Henri Quatre; but as a general

rule the dressings of the windows, their balconies, and the string courses which mark the floors, are left to tell the story; and when this is the case it is really impossible to go wrong. All that is then required is the application of a certain amount of ornament, necessary to elevate the building into an object of Fine Art. When this is done, all that remains open to criticism is the quality of that ornament, and the appropriateness with which it is applied to the various parts of the design.

It may be scarcely within the scope of the present work to allude to contemporary buildings, or to criticise the works of living architects; but it is impossible to conclude this chapter without mentioning some of the great works now going on in France under the Second Empire.

One of the greatest and most successful of these is the completion of the great group of palaces formed by the junction of the Louvre with the Tuileries. The first attempt at this was made by Henry IV., who commenced the great gallery in his own clumsy style of Architecture, and in such a manner as to make the want of parallelism between the two palaces offensively apparent. Since his day, the great crux of French architects has been to get rid of the awkwardness then created; and there is not one of any eminence during the last two centuries who has not produced a design for effecting this object.

Nothing, however, has been done except erecting a portion of the north wing in a style corresponding to that of the south, which was commenced during the reign of the First Napoleon, and it was left for the late M. Visconti, under directions from the present Emperor, to set the problem practically at rest. This he has done most successfully, in the manner exhibited in the plan (Woodcut No. 112), where all the different stages by which this great group of edifices has been brought to its present state are marked out by the different tints employed, with the dates affixed to each. So ingeniously have the new portions been arranged, that the want of parallelism, pointed out above, is hardly felt. The only prominent defect remaining is the great extent of the *Place Carrousel*, and the lowness of the buildings which surround it; the *Place* itself being 850 ft. by 930, while the palace or the galleries are not generally more than 60 or 70 ft. high. Nothing could now remedy this except the erection of some large building in its centre. If, for instance, a tall triapsal domical church (as dotted in, in the plan, Woodcut No. 112) were placed with a porch where the *Triumphal Arch* now stands, it would not only reduce the whole to harmony, but would give to the group that one feature which is required to give it dignity. At present the buildings hardly rise above the dignity of the streets in their vicinity, and the whole wants some grand central feature to give unity to the group, and to distinguish it from the domestic edifices which approach so close to it on the north. Another mode in which this indispensable feature might have been supplied to some extent, would have been by elevating the north-eastern angle, where the new buildings abut on the *Rue*

Rivoli (at A in the plan), so as to make it a feature, which ought to have been as important as Barry's angle tower to the Parliament Houses. The situation in Paris is far finer, commanding, as it does, the whole of that long line of streets both ways. By a strange oversight, this angle is now the least dignified portion of the whole design. Notwithstanding these defects of conception, the architect deserves all praise for adopting a style which allowed him such freedom, while it harmonized so perfectly with what had been done before. The new portions are well proportioned to the areas in which they stand, the



142. View of the Angle of the Cour Napoléon, new buildings of Louvre. From a Photograph.

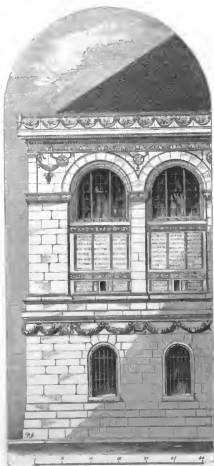
Place Napoléon being about 600 ft. by 400, while the average height of the buildings may fairly be taken as 100 ft. The whole design is also so free from the ordinary defects of concealment and shams, that it must be considered as about the best specimen of Palatial Architecture of modern times. It is quite true that the details might have been purer without losing any of their effect. Thus, a deeper cornice would have accorded better with the shadow obtained from the arcade below, while the tall wooden roofs that crown the pavilions are scarcely a legitimate mode of gaining height, and liable to become exaggerated and grotesque. But these may all be excused

by the necessity of adopting a style in conformity with the parts that existed before, and to which all these features legitimately belong. Even admitting this, however, if we compare the buildings surrounding the Cour Napoléon with anything that has been done recently in Italy or Germany, we can have no hesitation in awarding the palm to the French design. If we compare them with any of our own contemporary pro-

ductions, such as the Houses of Parliament or the British Museum, we see how happily it takes a medium course between the frigid Classicism of the one and the florid Mediævalism of the other; while it is in every respect suited to the wants of the age, and expressive of its feelings, to which neither of the others can make any pretension.

Another most successful effort of the same class is the new Hôtel de Ville, by Le Sueur. Here the difficulty was nearly as great, inasmuch as it was necessary to amalgamate the old façade of Francis I., in the centre of the principal front, with the new buildings which were to enclose and surround it on all other sides. The problem was, to give the new buildings sufficient importance, without dwarfing to any extent the old.

This has been most successfully accomplished, but it is perhaps owing to this that the building as a whole wants that commanding height which its situation requires, and which prevents its having that dignity, when seen at a little distance, which it possesses when seen from a nearer point of



143. Angle of the Library of Ste. Geneviève, Paris.

view. Like the new buildings of the Louvre, it is free from any sham or concealment, and its internal arrangements—especially the Great Gallery—are as fine as anything of their class in Europe. The Gallery of the Hôtel de Ville, though not so large or so rich, is far more artistic than anything of the sort that is to be found at Versailles.

The Library of Ste. Geneviève is another of the new edifices of

Paris well deserving of study, being wholly astylar, and, without pretending to be anything beyond a modern depository of books, it gives a promise of common sense being once more thought compatible with Architectural Art. When it is once discovered that a building can be made sufficiently ornamental without assuming a foreign disguise, the art will again be in the path of progress; and this truth seems dawning on the French architects, though whether to brighten into sunshine or not remains to be seen.



144.

New Bourse, Lyons. From a Photograph.

This Library is a parallelogram of 263 ft. by 75, with a projection for the staircase behind, and the height from the ground-line to the top of the cornice is 60 ft. The one defect of the design is its flatness. Had there been a projection in the centre, or at either end of the façade, it would have remedied this defect and supplied the shadow, to obtain which so many architects have been driven to employ porticoes and other incongruous details to their buildings.

The impulse given to building operations by the system adopted by the present Emperor of giving employment to the people has led to the erection of an immense number of civil and municipal edifices in the provinces, as well as in Paris. Some of them are not perhaps

in the best taste; many betray marks of extreme haste in preparing the designs, and a few of a lingering towards the Classical feeling of an earlier epoch. One of the most remarkable of the last class is the new Exchange just completed at Marseilles, which, notwithstanding the elegance of its details, is one of the least satisfactory buildings of the Empire. That just completed at Lyons errs in the opposite direction, some of its details verging on the Rococo; but, taking it altogether, it may be considered as one of the most typical examples to be found anywhere of what the French architects are aiming at and most admire. It is not very pure or very elevated, it must be confessed; but it may fairly be asked—is a purer or more elevated style compatible with the purposes of a Chamber of Commerce and an Exchange? A church, a palace, or a tomb requires it; but is not this style as dignified as the purposes to which it is applied? and truth in Art demands no more than this.



145.

Custom-house, Rouen.

The new Custom-house at Rouen is another favourable specimen of the mode in which the French architects of the present day design the minor class of public edifices. Neither the dimensions nor the purposes of such a building admitted of very great grandeur or richness being obtained. It is, however, sufficiently magnificent for the custom-house of a provincial city, and it expresses its purpose with clearness, while no useful element is sacrificed for the sake of effect, and no ornament added which in any way interferes with utilitarian purposes.

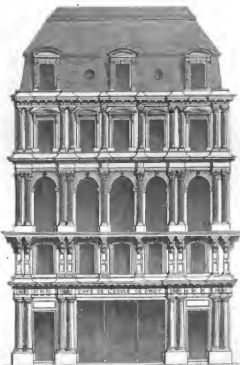
The ordinary receipt for such a design, especially in this country, would have been a portico of four or six pillars, darkening some and obstructing the light of other windows, besides necessitating the

building being—in appearance at least—only two stories in height. It is an immense gain when architects can be induced to apply the amount of thought that is found here; and with a little more care in the details, and a little more variety in the arrangement of the parts, this might have become a more beautiful design than it is, though few of its class can, on the whole, be called more satisfactory.

In several other of the new buildings of Paris and in the provinces there is shown a great tendency to get rid of the Orders, and, as in these instances, to depend upon the structural arrangement for expression. The worst feature of the case is, that the architects do not seem to have hit on any definite system of ornamentation, and consequently, in attempting to be original, they sometimes fall into mistakes as offensive as the stereotyped absurdities of their predecessors. They are, however, in the right path, and we may hope will be ultimately successful in producing a style suited to the wants of the age.

DOMESTIC ARCHITECTURE.

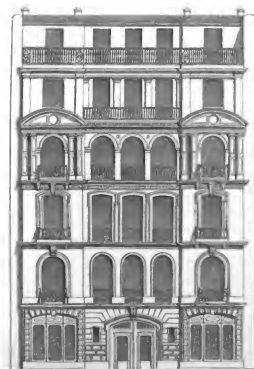
It is perhaps, however, in their Domestic Architecture that the French architects have achieved the greatest success, and with the largest amount of originality. The modern Parisian houses cannot of course vie with the *hôtels* of the older nobility in dignity or grandeur; but it is just because they do not attempt this that they succeed. They pretend to nothing but being the residences of a rich and luxurious community, and every house on its face bears marks of what it is, and of the rank or position of its occupiers. Even when they use the Orders with the most lavish hand, they do it with originality; and if it is objected that pillars are not wanted, they are not out of place, and do not pretend to make the building or its stories look other than it really is. The example (Woodcut No. 146) from the neighbourhood of St. Geneviève



146. House, Rue Soufflot. Le Sueur, architect.

is only an average specimen; but out of Venice it would be difficult to find anything so rich, and at the same time so devoid of affectation. Like most of the Parisian designs, a great part of its effect is due to the grouping of the windows. As is frequently the case in Venice, the centro has three or five windows, spaced tolerably close to one another, then a pier and a single window, with a similar pier beyond. In the façade of a dwelling house this is perhaps the happiest arrangement that has been hit upon, as it not only gives constructive solidity to the design, but suggests an internal arrangement of considerable dignity of effect.

If it be objected that the "Orders" are overdone in this example, it



147. Rue des Saussaies. Architect, Le Jeune.

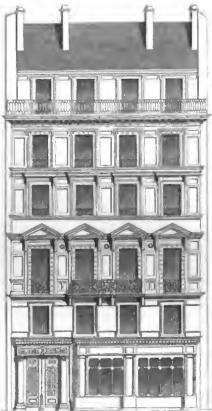
is easy to select another (Woodcut No. 147) in which they are only, as it were, suggested, but where the same principles of arrangement are carried out, and with as pleasing an effect. Or a third (Woodcut No. 148)¹ may be taken, where the Orders do not exist at all; and, though less rich in consequence, the design is scarcely less elegant. It by no means follows that, because the Orders are the only ready-made means of enriching a design at the present day, they are always to remain so. There are numberless other devices by which this may be effected, though, it is true, their employment requires not only taste but thought; and the great merit of Pa-

risian Architecture is, that these qualities are found there more frequently than in any other city of modern Europe. The great charm, however, is, that in Paris there are not three or four such designs as those quoted above, but three or four hundred—many, it must be confessed, of very questionable taste, and where the ornaments are neither elegant in themselves nor properly applied; but these are certainly

¹ These three Woodcuts are taken from Chézy's *Parallèle des Maisons de Paris*.

the exceptions, and even they tend to produce a variety and richness of effect in the new Boulevards and streets, which renders Paris the richest and most picturesque looking city of modern Europe. It is the only town, in fact, that affords an answer to the reproach of the Mediaevalists, who, when they single out the dull monotony of Regent's Park Terraces or Edinburgh Rows, need only turn to the new Rue Rivoli, or the Boulevard Sébastopol, to see that the dullness of which they complain is not in the style but in the architects, and that it must be as easy for us, if we had the wit to do so, to make our towns as picturesque, and far more beautiful than they were when filled with the rude and inconvenient dwellings of our forefathers.

The best period of this peculiar style of Domestic Architecture was the latter part of the reign of Louis Philippe, or the first two or three years of the second Empire. Since that time, taste in these matters has declined with wonderful rapidity in Paris. It may be that the demand for designs has been so great that the architects have not the time requisite for thought; or it may be that the excitement of sudden prosperity, and, consequently, an all-pervading *parvenuism*, has lowered the standard of taste generally. From whatever cause it may arise, the fact is certain that the profiles of many of the new buildings are bad and weak, that the details are confused and ill-drawn, and that pilasters are frequently employed to cover a certain surface with ornamentation without the necessity of thought. All this is very sad; for if a people so essentially artistic as the French are, and always have been, go astray, the prospect of architectural improvement in modern Europe is poor indeed.



148. House, Rue Navarin. A. Laine, architect.

TROPHIES AND TOMBS.

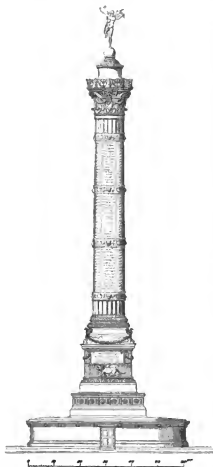
Whatever opinion we may be inclined to form regarding the Ecclesiastical or Domestic Architecture of the French, it is certain that they have exceeded all other nations of Europe in that pre-eminently Celtic form of Art which expresses itself in the erection of

Trophies to commemorate the glories of the nation, and of Monuments to record the memories of their dead.

It is of course in vain to expect, during a Renaissance period, when everything must be based on precedent, that the French architects should do anything very original in this line. All their Trophies must be either Columns or Arches, not because these were either the best forms originally, or because they are the most appropriate now, but because they were the only ones used by the Romans. It is in vain to suggest that a Hall or a Tower might be made quite as monumental and far more convenient for the purpose; there is no authority—and there the argument stops.

It must, however, be admitted that the French architects have occasionally made great efforts to rid themselves from this thralldom, and, except during the first Empire, with very tolerable success.

The Colonne de la Grande Armée at Boulogne is merely a Brobdingnagian Doric Column gone astray and settled on a plain with which it has



149. Colonne de Juillet, on the site of the Bastille.

no apparent connexion. Its counterpart in the Place Vendôme at Paris is better, and tells its tale most unmistakably, but, in doing so, falls into an error which borders on the ludicrous. Its aim is to be an exact copy of Trajan's Column at Rome, and, with great good sense, the architect has avoided the absurdity of putting the French army into the costume of that of Trajan. He has replaced the monumental

helmets, shields, and breastplates of the Roman soldiers with the coats, cocked hats, and boots and shoes of modern costume; and the picturesque implements of ancient warfare with the drums, muskets, and cannon of the present day. All this was wise and well, and only becomes absurd when placed on a Roman monument, and in the exact position in which the counterparts are found at Rome, so as everywhere to challenge comparison and provoke a smile.

If, when it was determined that modern costume should be represented, the architect had had the courage to adopt a polygonal base, a circular capital, and to suppress one or two of the more prominent Classical details, he might easily have retained the cylinder round which the French army climb to invisibility. He might, at the same time, have retained a sufficient amount of Classical detail to have suggested Rome, without bringing into such painful contrast the artistic treatment even of costume in ancient times as compared with the devices of the modern tailor.

Almost all these faults have been avoided in the *Colonne de Juillet*, which stands on the site of the Bastille. Of modern columnar monuments this is certainly the most successful. It is elegant and Classical in its details, and reasonably appropriate to its purpose. Its defects are, that, being only 165 ft. in height, it is scarcely sufficiently large for the very extensive Place, the centre of which it occupies; and the abacus of the capital ought certainly to have been circular. The angular forms of the Corinthian capital inevitably suggest an entablature; and of all things such a suggestion is the last wanted here. Notwithstanding these minor defects, it is certainly a great step in the right direction, and, if persevered in, we may yet see a monumental column worthy of its purpose.

On the whole, the French have been more fortunate with their Triumphant Arches than with their Columns. Of course there are some—such as the Arch of the Tuileries, the Arch at Marseilles, and that built by them at Milan—which, like the Imperial Columns, are copies and caricatures of the Roman examples, rendered ridiculous and incongruous, either by modern personages being put into Classical costumes, or modern dresses being associated with ancient forms. As far back, however, as the age of Louis Quatorze, they attempted to escape from this absurdity. The two great specimens of the age—the Porte St. Denis, erected in 1672, by Blondel, and the Porte St. Martin, in 1674, by Bullant—are quite free from the reproach of being copies of Classical examples. As they originally stood, they must have been dignified and imposing erections; but since that time they have been so surrounded by houses taller than themselves, that they look painfully insignificant.

The first named is by far the best and most original design of the two. Its façade is nearly square—75 ft. each way—and the footways are kept so entirely subordinate that the centre arch has all the dignity required, and there is no mistake as to its purpose. Architecturally, its worst defect is its want of depth, which gives it a weakness of appearance highly detrimental to its monumental cha-

racter ; and the sculpture borders so nearly on the Rococo of the age as to detract considerably from its effect. Still, it is a very original and a very grand design, and worthy of being imitated, as it was in the Arc de l'Etoile.



150.

Porte St. Denis. From a Photograph.

So far from being considered a defect, it is a merit in M. Chalgrin, to whom the design for the Arc de l'Etoile was intrusted, that he knew how to profit by what had been done by his predecessor, and, by improving on his design, to produce the noblest example of a Triumphal Archway in modern Europe. The dimensions of this arch are unsurpassed by any monument of its class in ancient or modern times, being 150 ft. wide, 75 ft. deep, and 158 in height to the top of the acroteria. It is pierced with only one great arch in the centre, 97 ft. high by half that width, and one transverse arch at right angles with the principal one. The very simplicity of its design, however, robs it of its apparent dimensions to an extent not easily conceived. As mentioned in a previous volume, its size is as nearly as may be the same as that of the front of Notre Dame at Paris, exclusive of the towers; it does not look half so large, and there is no doubt but that if pillars had been employed they would have added very considerably to its apparent dimensions, but to what extent they would have detracted from its monumental character is not so easily predicated. It is probable, however, by panelling and projections properly applied, without interfering with the structural arrangements, all the size the Romans knew how to give to their small arches might have been attained without the tawdriness that over-ornamentation imparted to them. The colossal character of the principal groups of sculpture detracts

also considerably from the size of the monument, and prevents the eye obtaining any scale by which to measure it. Another defect is that, while all the greater groups are Classical in their costume, or rather want of it, the smaller groups on the friezes are in modern dresses, and the effect of the mixture is most disagreeable. But, notwithstanding these defects, both for conception, and for purity and grandeur of design, it stands alone among the Triumphal Arches of modern Europe; and, being also most fortunate in its situation, it is one of the finest monuments and greatest ornaments of the city of Paris.¹



151. Elevation of the Arc de l'Étoile. From *Les Monuments Publics de la France*.²

There is another, though only a quasi-triumphal arch, erected in front of the Ecole Polytechnique, which, though infinitely smaller in scale—being only about 40 ft. in height to the top of the acroterium—is designed on the same principle, and so elegantly that it well deserves notice. It could not, of course, be increased in size without a multiplication of its present details; but it is just one of those examples in which the French architects are so peculiarly successful in combining elegance with appropriateness, and, stepping out of the beaten path

¹ The cost of this monument, which is still incomplete, has been 417,812*l*.

of the Orders, they seem occasionally on the point of inventing a new style, or perfecting that they have; but using the "Orders" saves so much trouble that they almost invariably lapse back to their more commonplace designs.



152. Entrance to the École Polytechnique. From 'Le Paris Moderne' de Normand fils.

It is impossible to go into any of the cemeteries even of the remote districts of France without being struck with the superiority of taste displayed in monumental sculpture and arrangement as compared with what is found in other less Celtic countries. In Italy there does not exist a respectable architectural monument from north to south.¹ What examples they do possess of this class are inside their churches, and more properly belong to the domain of Sculpture than to that of Architecture, and, though some of them are very beautiful, it is not to this art that they owe their effect. In Germany, as might be expected, there is nothing worthy of the name, and as for our English attempts, the less said of them the better.

In the French cemeteries, on the contrary, the monuments are always sepulchral, and generally appropriate to the circumstances of the persons whose memory they are designed to perpetuate. It is true that, till within the last few years, they have been frequently disfigured by an excess of Classicism, and by an affectation of Pagan symbolism; but these were the defects of the feelings of the age, and not peculiar to this class of objects; while every day their designs are improving, and there is more appearance of progress in them than

¹ Those of Verona are an apparent exception, but it is by no means clear who the Sculptors were or whence they came.

in almost any other class of subject. Their greatest defect, as purely architectural objects, is their want of size, few, indeed, being of such dimensions as to bring them out of the class of *objets d'art* into that of real structural Art, and some of the best opportunities have recently been thrown away in a manner much to be regretted. The little Chapelle Expiatoire, erected where the Due d'Orléans was killed, is a substitution of a toy church for what should have been a dignified monument. Placing the remains of the Great Napoleon in the crypt of the Invalides was about as great a mistake as could be committed—architecturally—although everything that has been done there is in good taste, and many of the details worthy of all admiration.¹ It is still only a crypt, a small, and from its position an insignificant and undignified part of the building in which it is situated. It is an opportunity thrown away which only the French could have availed themselves of, and for the sake of Monumental Art in Europe it is to be hoped they will soon find some subject worthy of their peculiar talent in this department of Art.

CONCLUSION.

After what has been said above, there is no great difficulty in instituting a comparison between the Renaissance styles of Italy and of France. To the former country belongs all the merit of the invention, everything there having preceded a corresponding development in France by at least half a century. To the Italians belongs exclusively the merit of inventing that class of domical churches of which St. Peter's at Rome is the typical example. At the present day a jury of architects might decide that there is small merit in the invention, but they ought to recollect that it has stood the test of more than three centuries. For all that time all the countries of Europe agreed that it was the most beautiful and the most appropriate form for their purposes, and we must not feel too sure that our present Gothic mania, which has hardly stood the test of thirty years, is not a mere passing fashion, and that another thirty years may not cause it to be regarded in the same ridiculous light as many other fashionable things which have been as enthusiastically admired in their day. The probability is that something which is neither a domical Italian church nor a many-aisled Gothic cathedral, is the thing suited to our wants; but in the mean while it is some credit to the Italians that they proposed a form which met with universal acceptance over the whole Christian world, and that for three hundred years nothing better was suggested anywhere.

The French did little or nothing to improve the form they borrowed from their southern neighbours, although using it with various local peculiarities, until at least the end of the last century. At this time the introduction of better understood Classical details made Ste.

¹ This tomb is said to have cost already 360,000*l.*; a sum sufficient to have erected a noble mausoleum.

Geneviève—internally—a model which, if followed out consistently, might have led to an improved state of things; but externally it is inferior to many churches, not only in Italy but in France, and on the whole it cannot be said that the French have surpassed the Italians as church-builders, except in the more correct appreciation of Classical details in some of their more recent productions.

As regards Civil Architecture the French have invented nothing so original or so grand as the early palaces of Florence or Rome; and though they have recently adopted a style as rich and as ornate as that of Venice, it is only after long years of neglect that they have learnt to appreciate the beauties of that mode of treating domestic buildings.

Elegant and meritorious as the early French Renaissance is, it sprang unfortunately not from the grand feudal fortresses of the nobles, but from the extreme refinements which had been introduced by luxurious monks into their convents, or wealthy bankers into their civil dwellings. The Roman and the Florentine buildings, on the contrary, were the lineal descendants—the counterparts, in fact—of the feudal residences of the nobles in those turbulent cities when defence was as necessary in the streets as it was to the French baron on his seignorial estate.

When the French advanced beyond the earliest stage of the Renaissance they found themselves without any leading principles to guide them. They had not around them the mass of Classic details which steadied and guided the Italian architects of the sixteenth century; and the consequence was, that, when they wished for something grander or more original than the style of Francis I., they attempted to graft the picturesqueness of the Gothic on the purity of the Classic styles, and produced the strange combinations of the age of Henry IV. From that time, with the increasing knowledge of Classic Art and greater experience in using it, the style of the French has gradually improved—with occasional backslidings—to the present day. The fate of Italian Art was different. So soon as they became satiated with the cold purity of that of the sixteenth century, they fell into the fantastic absurdities of the Borromini and Guarini school, and since then have had neither greatness nor aspirations sufficiently definite to rescue them from the depths into which they then sank.

If we compare the Palais Royal with the Piazza of St. Mark (excluding of course the church), we shall obtain a fair means of judging of the two styles in the medium age and average degree of merit, and probably no one will hesitate to award the palma to the Italian example.

The Library of the Piazzetta is, in like manner, a more palatial and more beautiful design than anything at Versailles or in any of the palaces of Louis XIV., while the Basilica of Vicenza will stand comparison with even the façade of the Louvre, and these are among the best and most typical examples of each of the styles. The great difference between the two seems to be, that Italian Architecture rose in glory to set early in frivolity and decay; the French style, on the contrary, rose in uncertainty, and was for a while obscured by caprice,

but gradually was settling to what we should have said a few years ago promised to be the harbinger of a new style and a guiding star to the other nations of Europe. Recent performances have done much to shake this faith in their future, but it cannot be denied that, so far as Civil or Domestic Architecture is concerned, the French are even at this moment considerably in advance of the other nations of Europe.

In Ecclesiastical Art they are rapidly preparing to follow in our downward path, to forswear all thought or originality of design, and be content with mere reproductions of the past. This, however, can hardly last long with them, for they have more taste and more innate feeling for Architecture than any other nation of Europe at the present day. If they fail to emancipate the art from the trammels of copyism, the prospect is indeed dark, and we must be content to cherish more and more the relics of the past, for the future would then afford no hope that we shall ever again see a truthful object of Architectural Art on which the mind can dwell with the same satisfaction which it feels in contemplating the ruder works of even the most uncultivated nations.

BOOK IV.—ENGLAND,

INTRODUCTION.

To write a consecutive history of the Renaissance styles in Great Britain is perhaps more difficult than it is with regard to those of any other country of Europe. Not because the examples are few or far between, nor because they have not been examined with care or published in detail; but on account of the devious and uncertain path their architects have followed, and the general absence of any fixed principles to guide them in their designs, or any certain aim to which they were persistently striving to attain. The difficulty is further aggravated at present by the architectural world being divided into two hostile camps—the Classical and the Mediæval—following two entirely different systems of design, and actuated by antagonistic principles. It becomes in consequence difficult to write calmly and dispassionately in the midst of the clamour of contending parties, and not to be hurried into opposition by the unreasoning theories that are propounded on both sides.

The steps by which the English were induced to adopt the Classical styles were slower and more uncertain than those which preceded its introduction into the other countries of western Europe. They clung longer to their Gothic feelings, and submitted to the trammels of Classical Art far more unwillingly, than their neighbours. It is in fact almost literally true that Inigo Jones¹ was the earliest really Classical architect in England, and he was born the year before Vignola died, and was only three years old when Palladio finished his career. The foundations of St. Peter's were laid a full century before we had a Classical building of any kind in this country; and the Escorial and the Tuileries had been long inhabited before we thought it necessary to try to rival them.

The teaching, however, of Classical literature in our schools, and the example of the Continent, at last took effect. And when once an architect presented himself capable of producing designs in the new style, and exhibiting specimens in all their fashionable proportions, it became the rage with us, as it was on the Continent; and our ancestors out-Heroded Herod in the strict classicality of their useless porticoes and the purity with which they used the Orders, wholly irrespective either of climate or situation: all this being only too sure a proof how little true feeling they at that time had for Art, and how completely they

¹ Born 1572; died 1652.

had lost the knowledge of the first principles that ought to guide an architect in the preparation of his designs.

In England, as in all other countries of modern Europe, the arts followed in the same track as literature, only that here they lagged more behind, and Classical forms and feelings are found in all literary productions long before their influence was felt in Art. When once, however, Architecture fell fairly into the trap, she became more enslaved to the rules of the dead art than literature ever was, and has hitherto found it impossible to recover her liberty, while her now emancipated sister roams at large exulting in her freedom. Still, it is impossible to read such a poem as Spenser's 'Fairy Queen,' and not to see that it is the expression of exactly the same feelings as those which dictated such designs as Audley End or Wollaton. The one is a Christian Romance of the Middle Ages, interlarded with Classical names and ill-understood allusions to heathen gods and goddesses,—the others are Gothic palaces, plastered over with Corinthian pilasters and details which represent the extent of knowledge to which men of taste had then reached in realizing the greatness of Roman Art.

It would be difficult to find two works of Art designed more essentially on the same principles than Milton's 'Paradise Lost' and Wren's St. Paul's Cathedral. The Bible narrative, transposed into the forms of a Greek epic, required the genius of a Milton to make it tolerable; but the splendour of even his powers does not make us less regret that he had not poured forth the poetry with which his heart was swelling in some form that would have freed him from the trammels which the pedantry of his age imposed upon him. What the *Iliad* and the *Æneid* were to Milton, the Pantheon and the Temple of Peace were to Wren. It was necessary he should try to conceal his Christian church in the guise of a Roman temple. Still the idea of the Christian cathedral is always present, and reappears in every form, but so, too, does that of the Heathen temple;—two conflicting elements in contact,—neither subduing the other, but making their discord so apparent as to destroy to a very considerable extent the beauty either would possess if separate.

The sonorous prose of Johnson finds its exact counterpart in the ponderous productions of Vanbrugh, and the elegant Addison finds his reflex in the correct tameness of Chambers. The Adams tried to reproduce what they thought was purely Classical Art, with the earnest faith with which Thomson believed he was reproducing Virgil's *Georgics* when he wrote the 'Seasons.' But here our parallel ends. The poets had exhausted every form of imitation, and longed for "fresher fields and pastures new," and in the beginning of this century wholly freed themselves from the chains their predecessors had prided themselves in wearing; but, just as the architects might have done the same, Stuart practically discovered and revealed to his countrymen the beauties of Greek Art. Homer and Sophocles had long been familiar to us;—the Parthenon and the Temple on the Ilissus were new. The poets had had the distemper; the architects had still to pass through it; and for fifty long years the pillars of the Parthenon or the Ilissian Temple adorned churches and galls, museums and magazines, shop-

fronts and city gates,—everything and everywhere. At last a reaction set in against this absurdity; not, alas! towards freedom, but towards a bondage as deep, if not so degrading, as that from which the enslaved minds of the public had just been emancipated. If the Greek was incongruous, it was at least elegant and refined. The Gothic, though so beautiful in itself, is hardly more in accordance with the feelings and tastes of the nineteenth century, and is entirely deficient in that purity and in the higher elements of the Art to which the Greeks had attained, and to which we were fast approaching when the flood-tide of Pseudo-Medieval Art set in and overwhelmed us.

It requires very little knowledge of Art to know that both Classic and Gothic imitations must be wrong;—that any Art which is essentially false in its principles, and which depends on mere copying and not on thought for its effect, must be an absurdity. But the public do not see this, and the instance of literature does not appear to them quite a logical parallel. Nor is it;—for with us a poem is a plaything. It does not cost more to print one moulded on the Greek Epos than it does one modelled after Dante, or one which is merely the outpouring of a heart too full to contain its imaginings. No one need buy unless they like it, and many live and die without giving the subject a serious thought, or caring for literature at all, excepting at the utmost as the amusement of a passing hour. But the case is widely different when we come to an art the productions of which are not only ornamental, but useful at the same time, and indeed indispensable to our existence, in this climate at least. From the highest to the lowest all men must spend money in the production of Architectural Art. Our comfort and our convenience are affected by it every day of our lives; our health, and not infrequently our wealth, is at the mercy of the architect. Though we could tolerate and be amused with a poem which is an almost undetectable forgery, we cannot live in a temple or a cathedral, and the gloom of a fendal castle and the arrangements of a monastery are equally foreign to our taste. It is, no doubt, easier to employ a clerk to copy details out of books than to set oneself to invent them; and it is a great relief to timid minds to be able to shelter themselves under the shield of authority; but laziness or timidity is not the quality that ever produced anything great or good in Art; and till men are prepared to work and think for themselves, the study of Architecture in England, though it may be interesting as a psychological or historical problem, can never rise to the dignity of an illustration of that noble art.

Only one other point requires to be noticed before going into detail on English Renaissance Art. It was hinted in the Introduction to this volume that, during the period of the Renaissance, Architecture ceased to be a study among the upper classes, and generally became the occupation of a very small, and frequently a lower and less educated class of men than those who occupied themselves with literature. This is, perhaps, more strictly applicable to England than to any other country. Not to be a scholar to a greater or less extent has always

been a reproach to an English gentleman. To be an artist, on the other hand, is to be eccentric and exceptional among the upper classes; and proficiency in Art is almost as great a reproach to a gentleman as deficiency in literary knowledge is and always has been.

This was more or less the case with all the nations of the Continent, but was more apparent in England than elsewhere. It has been remarked above that, during the Middle Ages, not only the nobility and gentry occupied themselves with Art, but that the bishops, and all classes of the clergy, from the highest to the lowest, looked upon Architecture as the master art, and considered a knowledge of it as being as indispensable to an educated gentleman as a knowledge of Latin is now. When, however, in the reign of Queen Elizabeth, learning became more generally diffused, and a knowledge of the classics indispensable, the Arts ceased to be part of a gentleman's education, and this has continued so till a very recent date indeed, though connoisseurship might occasionally be considered fashionable. Such knowledge of any art as might enable a gentleman to practise it in the same manner as he might write verses or compose an essay was wholly unthought of. Architecture was first relegated to builders, whose business it was to produce the greatest extent of accommodation, and the greatest amount of effect, at the least possible price. It afterwards was rescued from this depth of degradation, and taken up by a higher and better class of minds, but always has been followed as a trade or profession for the sake of its pecuniary emoluments; and, with the rarest possible exceptions, never practised from a mere love of the art, or from an innate desire to produce beauty. Nor are the architects to blame for this. A poet or a painter can realize his dreams at his own cost, and give them to the public as he creates them. An architect cannot work without a patron; and when the upper classes are not imbued with a love of Art, and have not the knowledge sufficient to enable them to appreciate the beautiful, the architect must be content to stereotype the taste of his employers, or to starve. When the taste of the public in Architecture is as low or as mistaken as it has long been, the highest class of minds will not devote themselves to it; and till they do so, and, far more than this, till the public thoroughly appreciate its importance, and master its essential principles, the art will certainly never recover the position it occupied during the Middle Ages, still less that which it occupied in Greece or Egypt.

CHAPTER I.

TRANSITION STYLE.

Elizabeth 1558.

James I. 1603.

To begin this chapter, as we have begun all previous ones, by treating of Ecclesiastical Architecture first, would be plunging too much *in medias res*, inasmuch as in England no church was erected of the smallest pretension to architectural design between the Reformation and the Great Fire of London in 1666, with the solitary exception of the small church in Covent Garden erected by Inigo Jones in 1631. The fact is, that the Catholics of the Middle Ages had left us an inheritance of churches more than doubly sufficient for the wants of the Reformed communities which succeeded them; and it is only now, that, the demand for church accommodation having overtaken the supply, we should be glad if many of those which, in Elizabeth's time, were deserted and left to fall to ruin, could be reappropriated to their original purposes. In the earlier part of the Renaissance period this was so entirely the case, that, but for the Fire of London in 1666, we should be obliged to wait till some time in the eighteenth century before we could find any churches worthy of notice in an architectural history.

Though the examples of Secular Art are infinitely more numerous and important in this early period, it is extremely difficult to fix a date when Classical details or Classical feelings first began to prevail. It certainly was not in the early years of Elizabeth's reign, though she ascended the throne in 1558, only six years before Michael Angelo's death. Leicester's buildings at Kenilworth, and her own at Windsor—wherever, in fact, English architects were employed—show signs of deviation from the purer Gothic types, but nothing to indicate the direction in which Art was tending; and it is probable that, after all, the first introduction of the style is really to be ascribed to two foreigners. One of these, Giovanni di Padua, was employed at Longleat and Holmby, and seems to have been induced to visit this country by Henry VIII., though whether as an architect, or in any other capacity, is not quite clear. The other, Theodore Hæve or Havenius of Cleves, was the architect of Gains College, Cambridge, erected between the years 1565 and 1574, which is certainly the most complete specimen of Classical Art which was at that time to be seen in England.

The buildings of the College itself are generally in Elizabethan Gothic, with only the very smallest possible taint of Classicality; but



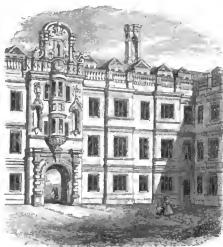
153.

Gate of Honour, Calus College, Cambridge. From a Photograph.

the gateways are adorned with Classical details to an extent very unusual in that age. The principal and most beautiful is the Gate of Honour, erected in 1574, and is one of the most pleasing as well as one of the most advanced specimens of the early Renaissance in England. Although its arch is slightly pointed, and the details far from being pure, the general design is very perfect. Owing to its greater height and variety of outline, it groups much more pleasingly with modern buildings than many of the more purely Classical Triumphal arches which since that time have adorned most of the capital cities of Europe. There are some other parts of the College, also, which show details of the same class, though not so complete in style as this.

There are besides this several very pleasing specimens of Renaissance Art at Cambridge, and some also at Oxford—though more at the former, which seems at that period to have had an accession of prosperity which enabled her to overtake in a great degree her richer and more venerable rival. The Chapel, especially the west front, of St. Peter's College is one of the best specimens of the art at Cambridge: but perhaps the most pleasing is the quadrangle of Clare College, which exhibits the English Domestic Architecture of that age with

more purity and grace than almost any other example that can be named. The older buildings seem to have been burnt down in 1525,



154. Court of Clare College. From Pugin's 'Memorials of Cambridge.'

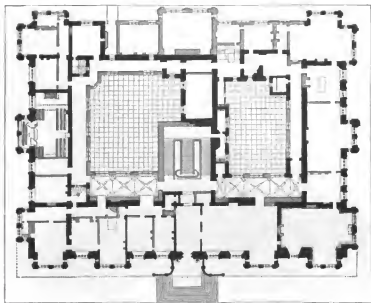
but no steps were taken to rebuild them till more than a century afterwards, in 1638, when the present quadrangle was commenced. It is internally 150 ft. long by 111 broad. Though strongly marked horizontal lines prevail everywhere, the vertical mode of accentuation is also preserved, and both are found here in exactly those proportions which indicate the interior arrangements; and the size and decoration of the windows are also in good taste and in perfect keeping with the destination of the building.

Another pleasing example is to be found in the north and south fronts of Neville's Court in Trinity College, which were nearly completed when their founder died in 1615. They are partially shown in Woodcut No. 179, further on. Though the upper stories are not so varied or so effectively broken as those of Clare, the arcade below is a very pleasing feature, rarely found in English, though so common in Italian and Spanish buildings of an earlier age.

At Oxford the most admired example of this age is the Garden-front of St. John's College, ascribed to Inigo Jones. It was commenced in 1631, and finished in four years; but so essentially Gothic are all its details, that it requires careful scrutiny and no small knowledge of style to feel assured that it does not belong to the Tudor period. The front of the building, however, towards the courtyard tells the story of its age much more clearly, being slightly more advanced than the buildings in Neville's Court, Cambridge, just alluded to. Its details are similar, though on a smaller scale, to those of the Hospital at Milan (Woodcut No. 74), the Castle at Toledo, and the house of Agnes Sorel at Orleans (Woodcut No. 121), though only introduced into England a century after they had been used on the continent of Europe, and then almost furtively, being confined to courtyards and interiors, while the exterior of the building was assimilated to the older and more truly English forms of Art.

A more celebrated example is the Gateway of the Schools at Oxford, designed by an architect of the name of Thomas Holt, and erected about 1612. The whole of the rest of the quadrangle—the erection of which is due to the munificence of Sir Thomas Bodley—is of the

debased Gothic of the age;¹ but, as at St. John's, an example of the Classical taste then coming into vogue is introduced internally. The portal is in consequence decorated with the five Orders piled one over the other in the usual succession, according to the Vitruvian precept; the lowest being Tuscan, the next Doric, over that comes the Ionic Order, and then the Corinthian. The Composite finishes this part of the design, but the whole is crowned by Gothic pinnacles, and other relics of the expiring style. Besides these, the whole design is mixed up with details of the utmost impurity and grotesqueness, making up a whole more to be admired for its picturesqueness and curiosity than for any beauty it possesses either in design or detail.



155.

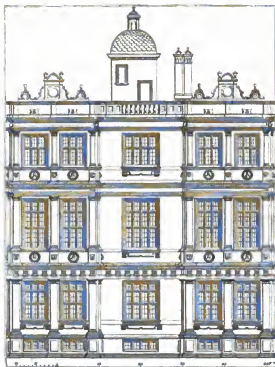
Plan of Longleat House. From Britton.²

Longleat, built between the years 1567 and 1579, is one of the largest as well as one of the most beautiful palaces in England of that day. Its architect, as before mentioned, was probably John of Padua, which would account for the far greater purity that pervades its Classical details than is to be found in the Colleges just mentioned, or in most of the buildings of this age. Its front measures 220 ft., its flanks 164, so that it covers about the same ground as the Farnese Palace at Rome, though both in height and in other dimensions it is very much inferior. It consists of three stories, each ornamented with an Order,—

¹ The work seems to have extended from 1610 to 1640.

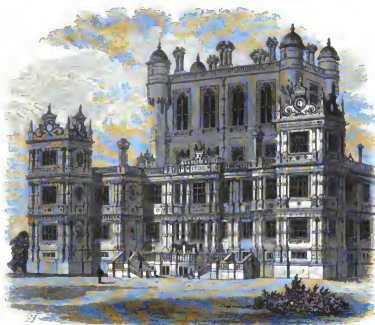
² The parts shaded light are recent additions or alterations.

each of which tapers gradually from the lowest to the summit in a very pleasing manner, the details throughout being elegant, though not rigidly correct. The most pleasing part of the design is the mode in which the façades are broken by projections—two at each end of the principal façade, and three on each of the lateral facos. This, with the windows being large and mullioned, gives to the whole a cheerful, habitable look, eminently suitable to a country residence of an English nobleman, though these features deprive it of that air of monumental grandeur which the Italian town palaces possess. We meet also in this design a peculiarity which distinguishes almost all English houses from



156. Elevation of part of Longleat. From Britton's 'Architectural Antiquities.'

those of Italy or France. It is, that the court—where there is one—is a back court. The entrance is always in the principal external façade, and all the principal windows of the living-rooms look outwards towards the country—never into the courtyard. Generally an English house is a square block, without any court in the centre; and when there are wings, they are kept as subdued and as much in the background as possible. The Italian cortile is entirely unknown, and the French basse-court is only occasionally introduced, and then by some nobleman who has resided abroad, and learnt to admire foreign fashions.



157.

View of Wollaton House. From Britton.

If from Longleat we turn to Wollaton, which was commenced in the year after the other was finished, but by an English architect of the name of Smithson, we find the Orders used to about the same extent, and, as far as words could describe them, in about the same manner as at Longleat; but when we compare the two designs, instead of the almost Italian purity of the first, we find a rich Gothic feeling pervading the latter, and running occasionally into excesses bordering on the grotesque. The great hall, which rises out of the centre of the whole, and is plain in outline and Gothic in detail, overpowers the lower part of the design by its mass, and detracts very much from the beauty of the whole; but, with this exception, the lower part of the design is probably the happiest conception of its age in this country; and if repeated with the purity of detail we could now apply to it, would make a singularly pleasing type of the residence of an English nobleman. The rich mode in which the Orders are now used in Paris, for instance (Woodcut No. 147), shows how easily they could be made to accord with such a design as this, without any incongruity; and even Grecian purity of detail would accord perfectly with such an outline and such a use of the Orders. The age and associations attached to such a specimen as this are too apt to lead us into the belief that the incorrectness of the details adds to the picturesqueness of the effect, instead of the fact being exactly the reverse. Till tried, however, it will be difficult to convince people

that such is the case; and it may be feared that the attempt would involve too much originality for the present age.

Longford Castle was again commenced just as Wollaton was finished, or in 1591; and, if anything, shows a further reaction towards the older style. It is a triangular building with three great round towers at the angles, and the Doric pillars which adorn the porch support five pointed arches; and though those above are circular, the whole is very unlike anything that may be called Classic, or which was being erected at the same period on the Continent.

Hardwicke Hall in Derbyshire, though commenced in 1597, and therefore nine or ten years after Wollaton was completed, is even more Gothic than the latter is; and in its decay as picturesque and beautiful as many of the abbeys which preceded it in ruin.

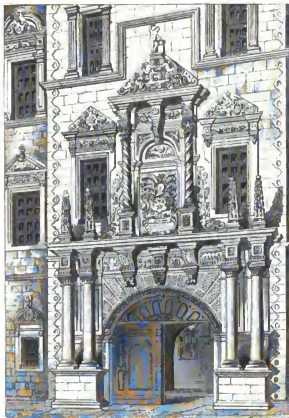
Temple Newsam in Yorkshire, built in 1612, hardly shows a trace of the Italian features which twenty or thirty years earlier seemed as if they would entirely obliterate the details and feelings of Gothic Art. Even Audley Inn, or End, commenced in 1616 by the Earl of Suffolk, is remarkably free from Italian feeling, though designed by a foreign architect of the name of Jansen. When complete, it must have been one of the largest and most splendid mansions of that age; and even now there is an air of palatial grandeur about the part that remains that few of the houses of that age possess. What little of Italianism is to be found in it is confined to porches and cloisters; there is no "Order" attached to the main buildings, and the windows are, throughout the large square mullioned openings, without dressings, so characteristic of the style.

Besides these there is a large class of mansions which time has sanctified and sanctioned, though they certainly are not beautiful, either from their details or from any grouping of their parts. Among the best known of these may be quoted Hatfield House, built in 1611; Holland House, in 1607; Charlton, in Wiltshire; Burleigh, built in 1577; Westwood, in 1590; Bolsover, in 1613; and many others of more or less note and magnificence: all picturesque, generally well arranged for convenience, and always having an air of appropriateness as the residence of a nobleman in the country—characteristics which make us overlook their defects of detail; and however tasteless many may have looked when new, it is impossible now to reason against the kindly influences which time has bestowed upon them.

This class of buildings can hardly be called Classic, or even Renaissance, in the same sense that we apply that term to continental buildings. It is only here and there that we are reminded, by a misshapen pilaster or ill-designed arcade, of a foreign influence being at work; and these are so intermingled with mullioned windows and pointed gables that the buildings might with equal propriety be called Gothic, the fact being that there is no term really applicable to them but the very horrid, but very characteristic, name of Jacobean. As designs, there is really nothing to admire in them. They miss equally the thoughtful propriety of the Gothic and the simple purity of the Classic styles, with no pretensions to the elegance of either. All they can claim is

a certain amount of picturesque appropriateness, but the former quality is far more due to the centuries that have passed away since they were erected than to any skill or taste on the part of the original designer.

Though late in date, Heriot's Hospital in Edinburgh is so essentially in the transitional style that it must be classified with those buildings which were erected before the reform introduced by Inigo Jones. It was commenced in 1628, and practically completed from the designs and under the superintendence of local architects by 1660.



156.

Gateway of Heriot's Hospital. From a drawing by W. Billings, Esq.

Though later than the Schools at Oxford, the chapel and other parts not only retain the mullions and foliation of the Gothic period, but their heads are actually filled with tracery, which had long been abandoned generally; but these features are mixed with Classical details treated in the Jacobean form, with a grotesqueness which the age has taught us to tolerate, but which have not in themselves any beauty or any appropriateness which can render them worthy either of admiration or of imitation.

Externally, great character is given to this building by the four square tower-like masses that adorn the angles; and between these, in

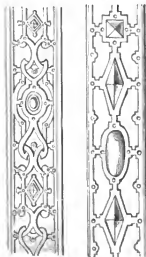


159.

Window-head Ornament.

what may be called the curtains, the windows are disposed without much attention to regularity either in design or position, the ornaments of each window being different, though all belonging to a class which is almost peculiar to Scotland. Generally

the windows are adorned with a pilaster on each side, supporting a richly-ornamented entablature; but above that, instead of the usual straight-lined or eurved pediment used by the Romans, and copied from them by the Italians, the Scotch employed a rich complicated piece



160. Pilaster Ornaments.

of blind tracery, if it may be so called. As used by them, the effect is not always pleasing; the design being frequently ungraceful, and the ornaments grotesque; but it is very questionable whether in principle it is not a more legitimate mode of adorning a window-head than the one we so generally make use of. It admits, at all events, of the most infinite variety of detail. Some of those at Glasgow College, or in Regent Murray's house in the Canongate, are as elegant as any; but there is scarcely a Scotch house of the early part of the seventeenth century which has not specimens to contribute. The style of these ornaments is singularly characteristic of the age. They show that love for quirks and quibbles which pervades the literature of the day, but they show also that desire for cheapness which, rather than beauty, was the aim

of the builders. Every architect knows how difficult it is to design, and how much more difficult it is to cut, all the hollow and curved mouldings which characterise every shaft and every mullion in the pure Gothic style, and how much its beauty depends on their delicacy and variety. Here, however, it is merely a square sinking, such as might be cut out of deal with a saw; and though it does produce a considerable effect at small cost, and is consistent with all the mouldings and mullions of the style, it will not bear examination, even when enriched and embossed, as it sometimes is, in pilasters and

other features. Like all the other details of the age, they never reach the elegance of the Classical, and are immeasurably inferior to those of the Gothic style which preceded it.

Taking it altogether, the English have perhaps some reason to be proud of their Transitional style. It has not either the grandeur of the Italian, the picturesqueness of the French, nor the richness of detail which characterised the corresponding style in Spain; but it is original and appropriate, and, if it had been carried to a legitimate issue, might have resulted in something very beautiful. Long before, however, arriving at that stage, it was entirely superseded by the importation of the newly-perfected Italian style, which in the seventeenth century had pervaded all European nations.

During the eighty years that elapsed from the death of Henry VIII. to the accession of Charles I., the Transition style left its traces in every corner of England, in the mansions of the nobility and gentry, and in the colleges and grammar-schools which were erected out of the confiscated funds of the monasteries; but unfortunately for the dignity of this style, not one church, nor one really important public building or regal palace, was erected during the period which might have tended to redeem it from the utilitarianism into which it was sinking. The great characteristic of the epoch was that during its continuance Architecture ceased to be a natural form of expression, or the occupation of cultivated intellects, and passed into the state of being merely the stock-in-trade of professional experts. Whenever this is so, "Addio Maraviglia!"

CHAPTER II.

RENAISSANCE.

Charles I.	1625	James II.	1685
Commonwealth	1649	William and Mary	1689
Charles II.	1660	Anne	1702

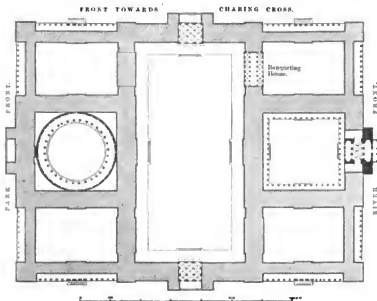
INIGO JONES.¹

VERY little is known of the early youth of Inigo Jones. What we do know, however, is, that though born of poor parents, he early showed so much taste for the Fine Arts, and such unusual ability, as to induce some noble patrons to send him to Italy in order that he might study them in the country which was then pre-eminent for their cultivation beyond any other in Europe. We further know that his success was such as to induce Christian, King of Denmark, to invite him as Court architect to Copenhagen; and that he enjoyed such favour with that king's sister, the wife of our James I., that he accompanied her to England, and was here immediately appointed her architect, and became Inspector-General of the Royal Buildings.

It gives a very exalted notion of the love which Inigo Jones had towards these arts, that he should in 1612,—on the death of Prince Henry, to whose service he was specially attached,—have returned to Italy; abandoning for a time his practice at Court, and the emoluments which must then have been accruing to him, in order that he might, at the age of forty, complete his studies, and thoroughly master the principles which guided the great Italian architects in the designs which to his mind were the greatest and most perfect of all architectural productions.

On his return he produced his design for Whitehall, on which his fame as an architect must always principally be based; for, although it never was carried out, the Banqueting House, which was completed between the years 1619 and 1621, shows that it was not merely an architectural dream, but a scheme which might, in great part at least, have been completed, had it not been for the troubles preceding the Revolution. Its greatest error was that it was conceived on a scale as far beyond the means as it was beyond the wants of the monarch for whom it was designed. This was so much felt that a new design had to be prepared and submitted to the king in 1639, which showed the palace reduced, not only in scale, but intended to be

¹ Born 1572; died 1652.



161.

Block Plan of Inigo Jones's Design for the Palace at Whitehall.

carried out with so much plainness, and altogether in so inferior a manner, that it is difficult to believe that it is by the same hand as the former design. This last proposal is that published by Campbell in the '*Vitruvius Britannicus*;' the former is that to which Kent devoted the beautiful volume so well known to amateurs. As both contain, as a matter of course, the one fragment which has been erected, it is only fair, in speaking of the architect's design, to refer to the one which he conceived in the vigour of his talents and when fresh from his Italian studies; and not the impoverished makeshift which the troubles of the times forced him to propose in order to meet the altered circumstances of his employers.

As originally designed it was proposed that the palace should have a façade facing the river, 874 ft. in extent, and a corresponding one facing the Park, of the same dimensions. These were to be joined by a grand façade facing Charing Cross, 1152 ft. from angle to angle, with a similar one facing Westminster. The great court of the palace, 378 ft. wide by twice that number of feet in length, occupied the position of the street (120 ft. wide) now existing between the Banqueting House and the Horse Guards. Between this and the river there were three square courts, and on the side towards the Park a circular court in the centre, with two square ones on either hand. The greater part of the building was intended to be three stories in height, each storey measuring, on an average, about 30 ft., and the whole block, with podium and balustrade, about 100 ft. The rest, like the Banqueting House, was to have been of two stories, and 78 ft. high.

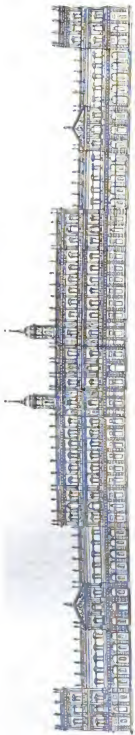


Diagram of Inigo Jones's Design for the Palace at Whitehall, Westminister Front.

162.



Diagram of River Front of Inigo Jones's Design for the Palace at Whitehall.

163.

Had such a palace been executed, it would have been by far the most magnificent erected in Europe, either before or since. It would have been as large as Versailles, and much larger than the Louvre or Tuileries taken separately; and neither the Escorial nor the Caserta could have compared with it. The river façade of the New Houses of Parliament is nearly identical in extent with that proposed by Jones for the river front of his palace; except that its proportions are destroyed by being much less in height; and the smallness of the parts and details contrasts painfully with the grandeur of Jones's design. If the new Parliament Houses were continued westward, so as to include the Abbey towers in their western façade, their extent would be nearly the same, and thus some idea may be formed of the scale on which Whitehall was designed.

It was not, however, in dimensions, so much as in beauty of design, that this proposal surpassed other European palaces. The only building to compare with its internal courts is that of the Louvre; but that is less in height and dimensions, and has not the simple grandeur which characterizes this design; and it wants, too, the variety which is produced by the different heights of the parts—in the great court especially—and the richness of effect produced by the change of the design in the various blocks. Externally Whitehall would have surpassed the Louvre, Versailles, and all other palaces, by the happy manner in which the angles are accentuated, by the boldness of the centre masses in each façade, and by the play of light and shade, and the variety of sky-line, which is obtained without ever interfering with the simplicity of the design or the harmony of the whole.

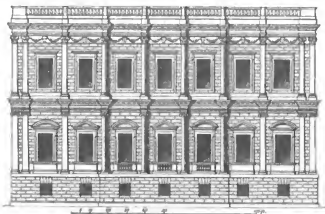
One of the most original parts of the design was the circular court, 210 ft. in diameter. It was to have been adorned on the lower storey with caryatid figures of men, doing duty for the shafts of Doric columns, and above them a similar range of female statues, bearing on their heads Corinthian capitals, to support in like manner a broken entablature. It need hardly be said that the design would have been better if the capitals had been omitted, and they had been treated merely as statues; but either way the effect would have been very rich; and the circular form of the court, with the dimensions given, would have been most pleasing.

Perhaps the part of the design most open to criticism are the little cuppolini which crown the central blocks in each façade. They certainly are not worthy of their situation; but they might easily have been improved, and in perspective they would not have looked so insignificant as they do in elevation.

One other defect remains to be pointed out; and it is one that practically would either have prevented the palace being built, or would have required alteration immediately afterwards. It is the smallness of the entrances to the Great Court; only one archway, 13 ft. wide, being provided for that purpose. The palace must have been cut off from either the river or the park by a public roadway, or all the traffic between London and Westminster must have passed through this court. According to the design, the thoroughfare was to have

been outside; but even then so small an entrance is utterly unworthy of so great a palace. There would, of course, have been some difficulty in interrupting the principal suite of apartments by raising an archway so as to cut them; but, by whatever means it was done, a grander entrance to the palace was indispensable, even irrespective of the through traffic; and it is one of the defects of this design, as of the new buildings of the Tuileries, that no portal worthy of the palace is provided anywhere.

The Banqueting House, as it now stands, is certainly neither worthy of the inordinate praise or the indiscriminate blame which has been lavished on it. It is true that it is a solecism to make what is one room internally look as if it were in two stories on the exterior; but then it was only one of four similar blocks. That exactly opposite was to have been a chapel with a wide gallery all round, and consequently



161.

Banqueting House, Whitehall.

requiring two ranges of lights. The other two were part of the general suites of the palace, and consequently could not afford to be 57 ft. high internally, as this is. At present it looks stuck up and rather meagre in its details; but as part of a curtain between two higher and more richly-ornamented blocks of building this would have disappeared. Its real defects of detail are the pulvination of the lower frieze, which is very displeasing, and the height of the balustrade. But, on the other hand, the windows are well proportioned and elegant in ornament,—the voids and solids are well balanced, and the amount of ornament sufficient to give an appropriate effect without being overdone; and, what is perhaps of as much importance as anything else, the whole is designed on so large a scale as to convey an idea of grandeur, giving a palatial effect irrespective of any merits of detail it may possess.

In the erection of the church of St. Paul's, Covent Garden, Jones had probably the fortune to raise the first important Protestant church now known to exist; and as we learn that his instructions were the

same as those given to most architects in similar circumstances, viz. to provide the greatest possible amount of accommodation at the least possible expense, he is fairly entitled to claim a degree of success rarely accomplished by his successors.

The church was apparently commenced about the year 1631, under the auspices of Francis Duke of Bedford, as a chapel of ease to St. Martin's-in-the-Fields; although small in dimensions — only



163. East Elevation of St. Paul's, Covent Garden.
Scale 50 feet to 1 inch.

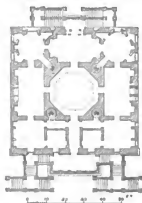
60 ft. by 133 — and almost barn-like in its simplicity, no one can mistake its being a church, and it would be extremely difficult, if possible, to quote another in which so grand an effect is produced by such simple means; its only really architectural features being two very simple plain pillars, forming a recessed portico in antis; which — though he probably did not know it — was one of the favourite and most successful inventions of the Greeks.

Here the effect is considerably marred by the curious local superstition that the altar must be towards the east. Though this is not known in Italy and other intensely Catholic countries, it is a favourite idea with English Protestants, and many fine churches have been spoiled in consequence. Here it is particularly painful, as the central door, being built up with stone, renders the portico unmeaning to a great extent, and gives a painful idea of falsehood to the whole design. But, barring this, the simplicity of the portico, the boldness of the projection of the eaves, and the general harmony and good taste pervading the whole building, convey a very high idea of Jones's talents, and of his power of applying them to any design, however novel it might be.

The repairs which Jones executed at St. Paul's Cathedral can scarcely be quoted as examples of his genius or taste. It was hardly possible that any one should succeed in casing a Gothic nave in an Italian exterior without such incongruity as should spoil both. His own taste and that of his age led him to despise what was then considered the barbarism of our forefathers. A great deal was thought to be gained when it could be disguised and hidden out of sight; but it would require a greater genius than the world has yet seen to accomplish this successfully, and we must not therefore feel surprised if he failed in this instance. Considered, however, by itself, the portico which he added in front was one of the finest, if not the very best, that ever was erected in England. It consisted of eight well proportioned Corinthian pillars in front, each 47 ft. high, with two square ones on the angles, and was three pillars deep; the whole well proportioned and elegant in all its details, standing well on its step, and with no useless pediment to crush it. On the whole it may be considered the best example of its class in this country before that of St. George's

Hall, Liverpool, and shows what a thorough master of his art its designer was, even at that early period.

Perhaps the most successful of Jones's smaller designs is the one he furnished for the Duke of Devonshire's villa at Chiswick. It was avowedly suggested by that of his idol Palladio at Vicenza; but he had too much taste and originality to copy it literally, as was done at Mere Hall, or to thrust two rooms into two of the porticoes, as was done at Foot's Cray. On the contrary, Jones improved the form of the dome, and he added only one portico, which, in fact, was necessary to suggest the design; and he so modified the elevation of the three remaining sides as to make them elegant and appropriate façades for an English nobleman's villa. The disposition of the interior is as elegant and dignified as that of the exterior, and, for its purposes, as pleasing as any to be found anywhere. It may be objected that the introduction of the portico



166. Villa at Chiswick. From Kent.

is altogether a mistake; that it trammels the whole design, and is of no use. Such, however, was not the opinion of either architects or their employers in those days. All were hankering after classicity, and a portico was the feature best known, and the one which most

readily suggested the ideal they were seeking after. As it was afterwards used, in a great many instances it was an absurdity which nothing can excuse; but not as applied here to what was merely the suburban villa of a refined nobleman, and where, consequently, if anywhere, it was permitted to indulge in learned fancies, irrespective of their utilitarian application.



167. Elevation of Villa at Chiswick. From Kent.

In the façade which Jones designed for Wilton he omitted the Order altogether, and sought merely to attain the effect he desired by a pleasing proportion of the parts among themselves, and a sufficient scale to give dignity to the mass; and so successful was he that this design has been repeated over and over again in the country seats of



163.

Facade of Wilton House, Wiltshire.

English noblemen. There is little fault to be found with the elevation, which is both elegant and appropriate, unless it is being too plain for the purpose. This is a defect that might easily have been removed by richer dressings round the windows, or by panelling; but these ornaments were not then considered such essential parts of a Classical design as they have since become; and an architect of those days, when called upon to enrich such a façade as this, could think of nothing better than adding a portico of from four to eight pillars, running through two or more stories, and plastering on useless pilasters wherever pillars could not be put. No architect was so free from these defects as Jones, and nothing gives a higher idea of his genius than to see how he avoided the faults of his master Palladio, and only used the Orders according to the dictates of his own good taste.

It is too much the fashion at the present day to ascribe to Jones every remarkable building erected during the reigns of the first two Stuarts; and if he was guilty of many of these, we must place him in a lower rank than he is generally supposed to be entitled to. The design of the river façade of Greenwich Hospital is almost always said to be his, without a shadow of documentary evidence, merely, apparently, because his son-in-law and pupil, Webb, superintended the execution of it; but it is almost impossible to believe that the architect of Whitehall and Chiswick could have designed anything so clumsy in its details. It has great three-quarter columns running through two stories, crowned by an ill-proportioned attic, and with great useless pediments shutting up the windows of the upper storey. From its size and position, and the material of which it is built, and, more than this, from the extent to which it has afterwards been added to, the façade of Greenwich Hospital is a grand and imposing mass; but it would be difficult to point out anywhere in Europe, even during the reign of Henri Quatre, any design that will less bear examination. The model adopted here seems to have been the façade of St. Peter's at Rome, and it certainly has not been improved upon.

Another design which is ascribed to Jones, but which certainly belongs to his son-in-law, is that for Amresbury in Wiltshire, which, though considerably more elegant and tasteful than Greenwich, has



169.

Elevation of the House of Amresbury, Wiltshire.

faults he never would have committed. It is interesting, however, as one of the earliest examples of the type on which nine-tenths of the seats of English gentry were afterwards erected; almost all subsequent houses consisting of a rusticated basement, which contains the dining and business rooms; a *belle étage*, and bedroom storey, with attics in the roof. On the basement, and running through the two upper stories, is the portico—always for ornament, never for use, and generally so badly applied as to be offensively obtrusive. In this instance there are no upper windows under the portico, but those on either side range so exactly with the entablature of the Order that we cannot help perceiving that there is a falsehood about it contrary to all the principles of true Art.

Some of the English country seats built after Amresbury are better in design—many very much worse—but nearly all follow its general features, thus differing essentially from those of either Italy or France. Generally they are cubical blocks without courtyards—seven, nine, or eleven windows on each side, according to circumstances, and three or five of these on the principal front covered by a portico. It is a simple receipt, and, barring the portico, one eminently suited to the climate, and capable of internal comfort and external grandeur, though the attempt to render it Classical has frequently marred the latter quality. So far as we know, either from his published drawings or from such designs as can authentically be ascribed to him, no

examples of this class were proposed by Jones. On the contrary, there is an originality and playfulness about his published designs which might have made more expensive and less comfortable dwellings in this country, but would always have been elegant, and never commonplace. He fell, however, upon evil days, as the troubles of the Commonwealth supervened before his career was half over, and before any of his great conceptions were practically realised; but we know enough of what he did, and of what he could do, to be able to assign to him the very first rank among the artistic architects of England during the Renaissance period. Wren may have been greater in construction, but was not equal to Jones in design; and we look down the ranks from that day to this without finding any names we can fairly class with those of these two great men. This, however, may be owing to the circumstances in which the architects of subsequent ages were placed more than to the individual deficiencies of the men themselves.

II.—WREN.¹

If Inigo Jones had a practical monopoly of the architectural profession in England up to the time of the Commonwealth, that of Sir Christopher Wren was even more complete after the Restoration; for no building of importance was erected during the last forty years of the seventeenth century of which he was not the architect.

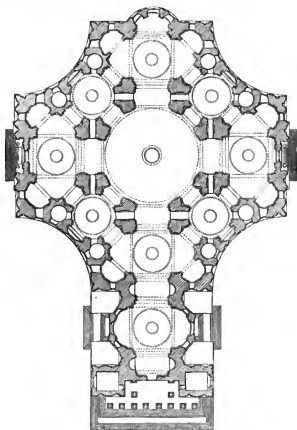
Both by birth and education Wren was essentially a gentleman, and at a very early age was remarkable as a prodigy of learning, not only classical but mathematical. The bent of his mind, however, seems to have been towards the latter; and he early distinguished himself by the zeal and success with which he cultivated the physical sciences; but we do not know either what first made him turn his attention to Architecture, or when he determined on following it as a profession. It certainly could hardly be during the Commonwealth, when there was no room for its exercise; but three years after the Restoration we find his name on a commission for repairing and restoring Old St. Paul's, and acting as the architect to carry out the works determined upon. In the following year (1664) he gave the designs for the Sheldonian Theatre at Oxford; and as that building was wholly carried out from his plans and under his superintendence, and is also one of his best and most difficult works, we may assume that he was then an architect by profession, and had mastered all the preliminary studies requisite for its exercise.

It is not, however, yet clear that even then he would have followed it exclusively, and might not have gone back to astronomy and the mathematical pursuits in which he had achieved so great a reputation, had it not been for the Great Fire of London in 1666. He was at Paris, studying apparently the works then going on there, when this great calamity happened; and hurried back immediately to assist in taking his share in the great work of restoration.

¹ Born 1632; died 1723.

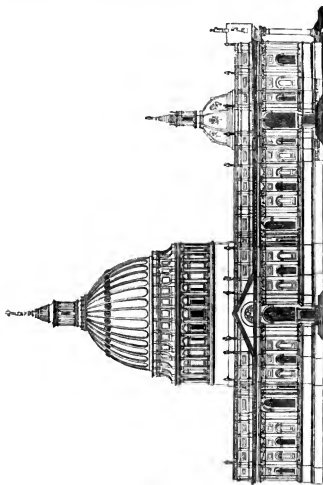
His first great step in this direction was preparing a plan on which he proposed the city should be rebuilt. Unfortunately for us it was found impracticable at the time to carry this out, as, had it been followed, it would have made London not only one of the handsomest, but one of the most convenient cities in the world. The opportunity, however, was lost; and subsequent improvers can only continue to mourn over the blindness or the selfishness of their forefathers.

Although he was not permitted to direct the alignment of the streets, the fire gave him an opportunity of rebuilding St. Paul's and some fifty other churches; and so completely established his reputation that every individual work of importance for nearly half a century was intrusted to his care; and although we cannot but rejoice that so competent a man was found for so great an occasion, we must at the same time feel that more work was thrown on his hands than any one man could perform, and consequently many of his designs show marks of haste, and of a want of due consideration.



170. Plan of St. Paul's Cathedral, as originally designed by Sir Christopher Wren.
Scale 100 feet to 1 inch.

The greatest of all his works is of course St. Paul's—the largest and finest Protestant cathedral in the world, and, after St. Peter's, the most splendid church erected in Europe since the revival of Classical Architecture. The fire had decided the fate of the old cathedral, but it was not till nine years afterwards (1675) that any practical steps were taken to rebuild it. The foundation stone of the present church was



Side Elevation of St. Paul's Cathedral, as shown in the model of the first design.

laid on the 21st June in that year, and thirty-five years afterwards the top stone of the lantern was laid by Sir Christopher Wren, thus practically completing the building in 1710.

As early as 1673 Wren had prepared several designs for the new church, which were then submitted to the King; and one (apparently the one he himself liked best) was selected, and a model ordered to be

prepared on such a scale and in such detail as might prevent any difficulty arising afterwards in the event of the architect's death. That model still exists, now under repair, at the South Kensington Museum, and is so complete that we have no difficulty in criticising it as we would a church which had been completed. As will be seen from the annexed plan, it is arranged much in the same manner as Sangallo's design for St. Peter's (Woodcut No. 24)—practically a Greek cross with a dome in the centre, and a detached frontispiece, joined to the main body of the building by a narrow vestibule or waist, in which are situated the principal entrances. The central dome, which was to have been of the same diameter as the present one (a little over 100 ft.), was, like it, to stand on eight arches—four of them 40 ft. in diameter, the other four about 26 ft. These opened into eight apartments, each covered by a dome 40 ft. in diameter, but placed at varying distances from the central dome. For the purposes of a Protestant church it cannot be doubted that this arrangement is superior to that of the present church, the great defect being a want of definite proportion between the small and large arches supporting the dome. As they all sprung from the same level, the wide arches are too low, the narrow ones are too high; but the practical difference is so slight that it looks like bad building, or as if the architect had made a mistake in setting out the work, and tried to correct his error by a clumsy device. Notwithstanding this defect, the interior of the church as shown in the model would probably have been as superior to that of the present church as the exterior would have been inferior. There is no doubt but that the proposed western portico was a noble feature, but its effect must have been very much marred by the attic, which, as in St. Peter's, was to crown the Order everywhere; and on every side, except exactly in front, the nearly detached vestibule to which the portico belonged would have been seen to be a sham, only meant to hide the narrow nave and the entrances behind it. As at St. Peter's, too, the dome would have risen through the roof, and never been seen in connection with its supports; and as it was lower, its effect, though designed to be of stone, would have been very much inferior in appearance to that now erected. The hollow curve, also, connecting the transepts with the nave and choir, would have had a most disagreeable effect, adding considerably to the total want of repose in the whole outline. If we consider that in addition to this the whole would, like St. Peter's, have been plastered over by a series of useless but gigantic Corinthian pilasters, surmounted by a clumsy attic, and, between these, sometimes great windows and sometimes small openings, at one place in one storey, at another in two or three, without any reason being apparent externally for the change, we may understand that, notwithstanding all that may be urged against the present building, we may fairly congratulate ourselves, in so far as the exterior at least is concerned, that Wren was forced to modify his plans before commencing the erection.

It is generally reported that the change was insisted upon by the Duke of York, who wanted a building more suited to the Catholic

ritual than this church would have been; but more perhaps is due to that strange conservative feeling of the nation which made them spoil Inigo Jones's church in Covent Garden, in order that the altar might be at the east end, and which makes us now erect Gothic churches, not because they are either more beautiful or convenient than others that might be designed, but because our forefathers built in that manner.

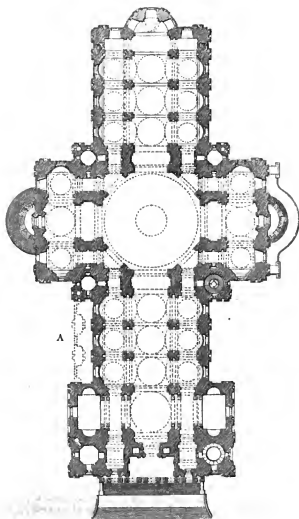
The ground plan of the present church is modelled, as nearly as the difference of style would admit, on the plan of a Gothic cathedral of the first class. Internally it is 460 ft. long, 240 ft. wide across the transepts, and 94 ft. across the nave. The only great innovation on Gothic principles is the introduction of a central dome, and even for that authority may be found at Ely.¹ Here, however, the great arches are not managed so happily as in the first design. The intermediate arches lead nowhere; and the archivolts of all the eight being carried to the same height, the alternate arches are filled up by a series of constructive expedients as destructive of architectural effect as anything ever designed.² Even the vista obtained along the aisles is neutralised by the way in which it is obtained; and the eye, looking along them, never reaches beyond the great void of the dome; nor does it occur to any one that the little passage seen beyond is in fact a continuation of the aisle. If we may judge from this one experiment, it may safely be said that it was a mistake artistically to rest the dome on eight instead of four arches, though constructively there is some mechanical advantage in so doing. Even if it were possible to have eight equal arches, 40 ft. each in diameter, they would be too small for a dome exceeding 100 ft. in width, and the naves that they lead to must always appear narrow and disproportioned. Four great arches of 60 ft. each, which is about the proportion adopted at St. Geneviève of Paris, would have been a far nobler and better proportional scheme, and had it been adopted here would have saved much that is extremely objectionable.³ The Byzantine architects adopted generally a support-

¹ See 'Handbook of Architecture,' Woodcut 700.

² Wren's own suggestion for getting over the awkwardness he felt he had introduced here was to place seated statues of the four Evangelists in the upper loggie, and with wooden curtains supported by cherubs to hide the cheeks of his opening. In addition to these he proposed to place two figures of angels resting on each of the segmental cornices, like the Night and Morning in Michael Angelo's tombs of the Medici. With all these he would no doubt have been able to distract the attention from the badness of his architecture. A more legitimate mode of doing it—which might be adopted now—would be to mask the sides of the opening by real curtains, and to use the segmental cornices to support a balcony which would give relief, and meaning to the whole design. As the central area is now appropriated to divine service, nothing

could be more suitable than these tribunes in such a situation.

³ Nothing can well show more clearly the extraordinary ability with which the mediæval architects adapted their style to exigencies of this sort than the mode in which these difficulties were got over at Ely. The octagon there is practically about 80 ft. across; into this four arches open each 37 ft. wide, and four others only 27 ft. each, but, the arches being pointed, they all spring from the same level, and rise to the same height without inconvenience; and the dome, to the opening of the lantern, being only 94 ft. high, the proportion of the whole is infinitely more pleasing than in any Renaissance building. It may be a question whether a dome 100 ft. in diameter, or even 80 ft., could be constructed in stone in the form of that at Ely. It never has been attempted, but there seems no great reason to doubt but that it might be effected.



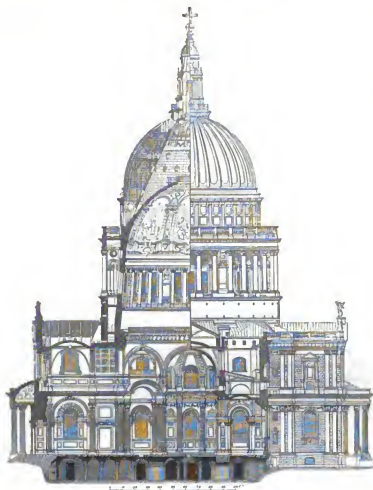
172.

Plan of St. Paul's Cathedral. Scale 100 feet to 1 Inch

ing arch as wide as the dome itself, which is perhaps a little in excess the other way, though it is certainly the most successful arrangement which has yet been adopted; its defect is that it gives rise to a certain appearance of weakness and want of accentuation. The best proportion between the width of a dome and the arches that lead into it would probably be as 80 to 100, or double that adopted by Wren.¹

¹ When, as at Granada (Woodcut No. 76), the dome is the closing feature of the vista, a different arrangement may be adopted with

success. The above remarks apply to domes with transepts and leading to choirs.



173.

Half Section, half Elevation of the Dome of St. Paul's Cathedral.

The Whispering Gallery is exactly 100 ft. from the floor, above which is a plain band 20 ft. in height, on which stand thirty-two Corinthian pilasters, leaning forward in a manner most painful to the spectator. The introduction of a cone to carry the lantern was a master-stroke of mechanical skill; but there is perhaps no instance in Monumental Architecture where the mechanical exigencies have been allowed so completely to govern the artistic as this, and we cannot but feel that we are vying so nearly on the limit of stability as to give rise to a feeling either of falsehood or insecurity utterly destructive of all grandeur in the building. The remedy for this was easy. It would have been to let the dome spring from the stringcourse

above the Whispering Gallery, and light it at the base. Had this been done then,—or were it done now,—the construction of the whole would have been far easier and lighter, the proportion of height to width far more agreeable, and the proportions of the dome far more in harmony with the rest of the building than now. The architect was evidently haunted with the idea that the whole of the external dome, or at least as great a part of it as he could scoop out, ought—as at St. Peter's and the Cathedral of Florence—to have been included in the church. It would have been far better to have admitted at once that the external dome was, like the spires at Salisbury, Norwich, and elsewhere, merely an ornament of the exterior of the building, and then have arranged his interior wholly irrespective of its external form. Or he might have adopted an internal dome with an opening of half its width, as is done in the Invalides at Paris (Woodcut No. 103), which would have hidden this defect without detracting from the internal height he was so ambitious of obtaining.

When we turn to the nave and choir we hardly find them freer from faults than the dome and its adjuncts. As at St. Peter's, the pier-arches are too few to give perspective effect; the architrave and frieze of the Order are cut away to give them the required height; and the vaulting is singularly confused and inartistic, consisting of a series of small flat domes, 26 ft. in diameter, each surrounded by a very heavy wreath of mouldings, which the little string of ornament along the arriss of the supporting vaults seems painfully inadequate to support. Many of these defects might be remedied or concealed by judicious painting; but nothing that can now be done will effectually cure them. The fact seems to be that Wren was met by the same difficulties which all architects have experienced in trying to adapt Classical details to Gothic forms; and, besides this, he seems always to have had before his eyes the mechanical difficulties of his task, and, when the two appeared to conflict, invariably to have allowed the mechanical exigencies precedence over the artistic. This has enabled him to construct a singularly stable church, but one which, as an artistic design, is internally very inferior to St. Peter's at Rome, immeasurably so when compared to such a church as St. Geneviève at Paris, and which must not be mentioned in conjunction with the Byzantine or Gothic designs whose features he was trying to adapt.

The effect of the interior of St. Paul's depends on the largeness of its dimensions, on its materials, and on the amount of its decoration, while the latter has also the advantage of being in a style which is never vulgar, and must always possess some beauty, however it may be misapplied. With these elements, it would be difficult indeed to produce a building which would not to some extent be effective or imposing. But with more artistic feeling Wren might have produced an interior at least twice as effective, and it is probable that Inigo Jones would have accomplished this had the task been intrusted to him.

The truth of the matter appears to be, that, both from the natural bent of his mind and from the circumstances of his education, Wren

was more of an engineer than an architect, and, consequently, always preferred the display of his mechanical skill to the expression of his artistic feelings; and, generally speaking, he had not that intimate knowledge of the resources of Architectural Art—especially the "*ars celare artem*"—which might have enabled him to avoid parading his mechanical expedients so offensively as he has frequently done, and most especially in the interior of St. Paul's. It is only fair to add, however, that if the building had been completed and ornamented with sculpture and painting to the extent designed by its architect, the effect would have been extremely different from what we now see. If all its structural defects could not have been concealed, attention might have been at least so far distracted from them that they would hardly have been remarked, and it might have been internally, as it certainly is externally, the second in rank among the Renaissance churches of Europe in beauty as well as in dimensions.

The arrangement of the exterior is infinitely more successful than that of the interior. The general design of the dome is by far the most pleasing which has yet been accomplished, and the employment of a wooden covering by no means objectionable under the circumstances. It is only what every Gothic building in Europe possesses—a wooden roof externally over a stone vault in the interior; and it enabled Sir Christopher to mould it to any form that pleased the eye, and to carry the whole gracefully to the height of 360 ft. from the floor-line to the top of the cross, without any apparent effort externally.

The colonnade surrounding the dome is also quite unsurpassed. By blocking up every fourth intercolumniation he not only got a great appearance of strength, but a depth of shadow between, which gives it a richness and variety combined with simplicity of outline fulfilling every requisite of good architecture, and rendering this part of the design immensely superior to its rivals. Owing also to the re-entering angles at the junction of the nave and transepts coming so close to it, you see what it stands upon, and can follow its whole outline from the ground to the cross without any tax on the imagination.

The great defect of the lower part of the design arose from Wren not accepting frankly the Medieval arrangement of a clerestory and side aisles. If his aisle had projected beyond the line of the upper storey, there would at once have been an obvious and imperative reason for the adoption of two Orders, one over the other, which has been so much criticised. Supposing it were even now determined to fill up the interval between the propylea and the transept, as shown by the dotted lines on the plan at A, the whole would be reduced to harmony; it would hide the windows in the pedestals of the upper niches, which are one of the great blots in the design; and, by giving greater simplicity and breadth to the lower storey, the whole would obtain that repose in which it is somewhat deficient.

The west front is certainly open to criticism as it now stands, without any suggestion externally of two stories, or two aisles of different heights. But its dimensions, the beauty of its details, the happy outline of the campaniles, the proportion of these to the façade, and



174.

West View of St. Paul's Cathedral. From a Photograph.

of all the parts one to another, make up the most pleasing design that has yet been executed of its class.

The same may be said of the transepts. Their circular porticoes, and the proportion of all the parts, their harmony with, and subordination to, the principal façade, are all extremely pleasing; and though it would be easy to mention minor points which our greater knowledge of the style would enable us to remedy, it will hardly be disputed that the exterior of St. Paul's surpasses in beauty of design all the other examples of the same class which have yet been carried out; and, whether seen from a distance or near, it is, externally at least, one of the grandest and most beautiful churches of Europe.

If the position of Sir Christopher Wren as an architect were to be estimated solely from what he has done at St. Paul's, the result would probably be, that his character would stand higher as a constructive than as an artistic architect. There are, however, two buildings close by, an examination of which must considerably modify the verdict.

The steeple of Bow Church is beyond all doubt the most elegant building of its class erected since the Reformation; and no Protestant church is more artistically or gracefully arranged than the interior of St. Stephen's, Wallbrook.

Like all Wren's steeples, that of Bow Church stands well on the ground; for he never was guilty of the absurdity of placing his spires astride on the portico, or thrusting them through the roof. It consists first of a plain square tower 32 ft. 6 in. wide by 83 ft. in height, above which are four stories averaging 38 ft. each. The first, a square belfry, adorned with Ionic pilasters, is 39 ft.; the next, which includes the beautiful circular peristyle of twelve Corinthian columns, is 37; the third comprehends the small lantern, and is 38 ft. high, which is also the height of the spire, the whole making up a height of 235 ft.

There are errors of detail which probably the architect himself would have avoided in a second attempt, and, as they arose only from an imperfect knowledge of Classical details, might easily be remedied at the present day. It only wants this slight revision to harmonize what little incongruities remain, and, if it were done, this steeple might challenge comparison with any Gothic example ever erected. Indeed, even as it now is, there is a play of light and shade, a variety of outline, and an elegance of detail, which it would be very difficult to match in any other steeple. There is no greater proof of Wren's genius than to observe that, after he had set the example, not only has no architect since his day surpassed him, but no other modern steeple can compare with this, either for beauty of outline or the appropriateness with which Classical details are applied to so novel a purpose.

The interior of St. Stephen's, Wallbrook, contains as much originality, and, as far as its architect was concerned, as much novelty, as the steeple of Bow. As remarked in a previous part of the work,¹ the plan of placing a circular dome on an octagonal base, supported by eight pillars, was an early and long a favourite mode of roofing in the East, and the consequent variety obtained by making the diverging aisles respectively in the ratio of 7 to 10,² infinitely more pleasing than the Gothic plan of doubling them, unless the height was doubled at the same time. Wren, however, is the only European architect who saw this, and



175. Steeple of Bow Church.
Scale 50 feet to 1 inch.

¹ 'Handbook of Architecture,' page 77.

² More correctly 7 to 9·8.

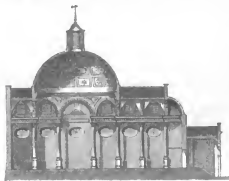
availed himself of it; and, stranger still is it that, though no church has been so admired, no architect has ever copied the arrangement. Had Wren ever seen an Indian building designed on this principle, he no doubt would have carried it further; but, as it is, he certainly



176. Plan of St. Stephen's, Wallbrook.
Scale 100 ft. to 1 in.

has produced the most pleasing interior of any Renaissance church which has yet been erected. Like most of his works, it fails a little in the detail. There is too much of the feeling of Grinling Gibbons's wood-carving carried into what should be constructive ornament; but, notwithstanding this slight defect, there is a cheerfulness, an elegance, and appropriateness about the interior which pleases every one, and which might be carried even further, if desired.

It is extremely difficult for us to know now what influences were brought to bear on Wren in making his designs; but it seems unaccountable that the architect who could design Bow steeple and the interior of St. Stephen's should have added to the former, a church which is an ill-designed barn



177. Section of the Interior of St. Stephen's, Wallbrook.
Scale 50 feet to 1 inch.

outside, and is paltry and overloaded to the last degree inside. Had he joined such an interior as that of St. Stephen's to his steeple in Cheapside, he would have produced a design that would have raised his character as an artist higher than anything he did at St. Paul's; and had any architect the courage to do so now, with such modifications as would naturally suggest themselves, we might have a

church as beautiful, and far more appropriate to Protestant worship, than any of the Gothic designs recently erected.

St. Bride's, Fleet Street, is another of Sir Christopher's most admired designs for a steeple. It wants, however, the poetry and the evidence of careful elaboration which characterize its rival of Cheapside. There is something commonplace in the five upper stories, each more or less a repetition of the one below it, and without any apparent connection. It is impossible to avoid the idea that they might all sink into one another, and shut up like the slides of a telescope. A console, a buttress, a sloping roof, anything, in short, between the stories, would have remedied this; and could so easily have been applied then—could, indeed, now—that it is wonderful that some such expedient escaped the attention of so great and so constructive an architect. Wren conquered this difficulty with perfect success at Bow church, but all subsequent architects have failed in reconciling the horizontal

lines of Classical with the aspiring forms of Gothic Art, and, as in the case of St. Bride's, been unsuccessful in fusing together the two opposing systems.

Externally the church is not remarkable for anything but its simplicity and absence of pretension; and internally the design is considerably marred by the necessity of introducing galleries on each side—a difficulty which no Classic or Gothic architect has yet fairly grappled with and conquered. Here the coupled columns which run through and support the arches of the roof are amply sufficient for the purpose, and the dwarf pilasters that are attached to them to carry the galleries tell the story with sufficient distinctness. But it makes a very thick and heavy pier below, which impedes vision more than is desirable, and the rear column that runs through the floor of the gallery has a very disjointed and awkward appearance. Notwithstanding these defects, it is a well-lighted, commodious, and appropriate Protestant church, which has seldom been surpassed in these respects, unless it is by St. James's, Piccadilly, which is another and somewhat similar design by the same architect.



178.

View of the Interior of St. James's, Piccadilly.

The two are, as nearly as may be, of the same area,—St. Bride's being 99 ft. long by 58 wide, St. James's 86 by 67, which is more appropriate for an auditorium; and the square pier which supports the gallery, and the single column that stands on it to carry the roof, is not only a more artistic, but a more convenient arrangement than the other. Its greatest merit, however, is the mode in which the roof is constructed; first as a piece of carpentry, but more as an appropriate mode of getting height and light with a pleasing variety of form. After St. Stephen's, Wallbrook, it is Wren's most successful interior; and, though the church is disfigured by a hideous east window and an ob-

jectionable reredos, and many of its minor details are unpleasing, it is one of the very best interiors of its class that we possess.

There are few of Wren's other churches in the city of London which do not show some good points of detail,—some ingenious means of getting over the difficulties of site or destination, and not one showing any faults of construction or useless display of unnecessary adjuncts; but scarcely any of them are so remarkable as designs as to admit of being illustrated in a general history; and, without illustrations, a mere enumeration of names and peculiarities is as tedious as it is uninteresting.

Although Wren, like most of his contemporaries, affected to despise the style of our ancestors, he seems occasionally to have been subjected to the same kind of pressure as is sometimes applied to Gothic architects at the present day, and forced to build in what he considered the barbarian style. When this was the case, he certainly showed to immense advantage; for though the details of his Gothic works are always more or less open to criticism, the spirit of his work was always excellent, and he caught the meaning of the Gothic design as truly as many of the most proficient of our living architects have been able to do.

One of the most successful of such designs is the tower of St. Michael's, Cornhill, which is exceedingly rich and bold. The church attached to it was elegant, classical Italian, and has recently been converted into Italian-Gothic, which accords neither with the locality nor the tower, nor those features of the church which it has been impossible to disguise.

A more successful design than this was the spire of St. Dunstan's-in-the-East, which, though not so strictly Medieval in its details as to attain perfection as a counterfeit, is still sufficiently imitative for effect, and the spire which crowns the whole, resting on four arches, possesses more elegance than the specimen at Newcastle which is said to have suggested it, or than any other examples of this peculiar type which have come down to us from the Middle Ages.

The western towers of Westminster Abbey were, as is well known, added by Wren, and their proportions are perfect, though their details deviate more from the Gothic type than is the case with either of the examples last quoted. This was a singular mistake for such an architect to make; for being here joined to a really old Gothic building, the contrast is painfully apparent, and a more exact imitation would have been most desirable.

The tower which Wren added to the parish church at Warwick is another example of how he caught the spirit while despising the details of the style. At a distance it seems one of the best-proportioned Gothic towers that can be found. On a close examination the details are all so completely Classic that, whether it is from the prejudices of education or any real or essential incongruity, we are offended at having been cheated into admiration, and feel inclined to put the whole down as a specimen of bad taste.

Besides the churches which he built, Wren had the good fortune to be called upon to erect more Royal palaces than any architect since his day; but he was far from being so successful with them as with his ecclesiastical buildings.

That which he erected at Winchester is little better than a great brick barrack, to which purpose it is now most appropriately applied. It possesses a portico of six Corinthian columns in the centre, and some very attenuated specimens of the same family in the angles, which are an attic taller than those they flank; but neither seem to belong to the building to which they are attached.

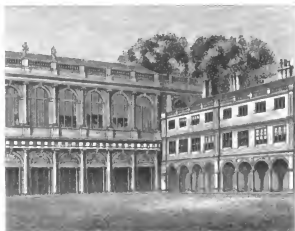
He was more successful at Hampton Court; though here the basement is too low, especially in the courtyard; and the dignity of the "bel étage" is destroyed by the circular windows over the principal ones, and, where Orders are introduced, they are merely as ornaments, and overpowered by the attic that crowns them. The great merit of this design is its largeness, and being devoid of all affectation. From the possession of the first quality, it contrasts favourably with Wolsey's palace, to which it is attached. Neither is of the best age of its peculiar style, nor perhaps the best of its age; but there is a littleness and confusion about the Gothic, as compared with the simplicity and grandeur of the Classic, which is altogether in favour of the latter. When, however, the earlier design is looked into, it displays an amount of thought and adaptation to its uses which is wholly wanting in the Classic. Wren's design looks as if it could have been made in a day,—Wolsey's bears the impress of long and patient thought applied during the whole time it was in execution; and though, therefore, the conception of the first is grander, the ultimate impression derived from the latter is more satisfactory and more permanent.

The less said about Chelsea Hospital the better. It would not be easy to find a worse building of the same dimensions anywhere; but the architect's fame is redeemed by what he did at Greenwich. The two rear blocks are certainly from his designs, and are not only of great elegance in themselves, but group most happily with the two other blocks nearer the river, the design and the partial execution of which belong to an earlier period.

As before mentioned, one of Wren's earliest works was the Sheldonian Theatre at Oxford; and though externally it does not possess any great dignity, the façade is elegant and appropriate, and the introduction of any larger features would have been inappropriate, and not in accordance with the two ranges of windows and other features which the necessities of the building required in other parts. The roof was justly considered to be in that age a perfect masterpiece of scientific carpentry, covering an area 70 ft. by 80, without any support. The whole interior is arranged so scientifically, and with such judgment, that a larger number of persons can see and hear in this hall than in any similar building in the United Kingdom; and why, consequently, neither Wren nor any one else ever thought of adapting its peculiarities to Church Architecture is not easy to explain.

The Library at Trinity College in the sister University is an

equally successful, though a far easier design. Practically it is not unlike the Library of St. Geneviève at Paris, which is so much admired (Woodcut No. 143), except that there the lower storey is occupied by books,—at Cambridge by an open cloister, but which no doubt the architect meant to be used as an extension, if ever more books were required by the College authorities. Not only is the upper storey well arranged and well lighted for the purposes for which it was intended, but externally it is a remarkably pleasing and appropriate design. The effect towards the courtyard is very much spoiled by the floor of the library being brought down as low as the springing of the arches of the arcade which supports it. Had the scale been sufficient, it would have been easy to remedy this defect by introducing smaller pillars to support the floor; but, there not being room, all that is done is to block up the tops of the arches, and it looks as if the floor had sunk to that extent; the whole design being characteristic of Wren's ingenuity and good taste, but also of his want of knowledge of the artistic principles of design.



179. Neville's Court, and Library Trinity College, Cambridge. From a Photograph.

It is singular that the architect of these two buildings should ever have erected anything so commonplace as the College of Physicians in Warwick Lane; but it is just this inequality that is so puzzling in Wren's designs,—as, for instance, the Monument at London Bridge is one of the most successful and most Classical columns which have been erected in Europe, though their name is Legion; but Temple Bar is, perhaps, the most unsuccessful attempt that ever was made to reproduce a Classical triumphal archway. Had Wren been regularly educated as an architect, or had he thoroughly mastered the details of the style he was using, as Inigo Jones had done, most of these incongruities would have been avoided; and there is no reason for supposing that such an education would have cramped his genius:—on the

contrary, every reason for believing that a perfect knowledge of his tools would have enabled him to work with more facility, and to avoid those errors which so frequently mar the best of his designs, and, it may be added, must inevitably vitiate the designs of any man who is practising an art based on false principles, and depending for its perfection on individual talent, and not on the immutable laws of Science.

Though he did fail sometimes, it cannot be denied that Wren was a giant in Architecturo, and, considering the difficulties he had to contend with, not only from the age in which he lived, but from the people he had to deal with, and the small modicum of taste or knowledge that prevailed anywhere, we may well be astonished at what he did accomplish that was good, rather than wonder at his occasional failures. His greatest praise, however, is, that though he showed the way and smoothed the path, none of his successors have surpassed—if, indeed, any have equalled—him in what he did, though more than a century has now elapsed since his death, and numberless opportunities have been afforded in every department of Architectural Art.

CHAPTER III.

EIGHTEENTH CENTURY.

Anne	1702	George II.	1727
George I.	1714	George III.	1760

THE history of Architecture in England during the eighteenth century, if not characterized by anything so brilliant as the career of either Jones or Wren, is marked in the beginning by the daring originality of Vanbrugh, and closes with the correct classicism of Chambers. It is also interesting to watch during its closing years the gradual bifurcation of styles which has since divided the profession into two hostile camps, following principles diametrically opposed to each other, and, in their angry haste, diverging further and further from the true principles which alone can lead to any satisfactory result in Art.

The two men who succeeded to Wren's practice and position—Hawksmoor¹ and Vanbrugh²—were both born in the "Annus Mirabilis" (1666), which made the name and fortune of their great prototype. The former was his friend and pupil, and, in some instances at least, employed to carry out his designs. From what we know of the pupil's own works, we may almost certainly assert that the double spires of All Souls' College at Oxford were designed by the master. They display the same intimate appreciation of the essential qualities of Gothic Art, combined with the same disregard of its details, which characterize the western towers of Westminster Abbey, or the towers at Warwick or in Cornhill; but in so far as poetry of conception or beauty of outline is concerned, they are infinitely preferable to most of the portals erected in Oxford even during the best age, and far surpass any of the very correct productions of the present day.

Hawksmoor was also the architect of St. George's, Bloomsbury, which is remarkable as one of the earliest of the churches with porticoes which became afterwards so fashionable. The portico here consists of six well-proportioned Corinthian pillars, but instead of pilasters at the back he has used half-columns, which look as if they had by mistake been built into the wall, thus adding to the appearance of uselessness these adjuncts usually suggest. The spire, which we are told is intended to realize Pliny's description of the Mausoleum at Halicarnassus, has at least the merit of standing on one side; and, if the houses were cleared away a little, so as to admit of its being seen,

¹ Born 1666; died 1736.

² Born 1666; died 1726.

the whole would form as picturesque a group as almost any church in London.

St. Mary's Woolnoth, in Lombard Street, is another church by the same architect, but in a very different style. Here the effect is sought to be attained by bold rustication and massive forms. All the forms are original, and to them the Classical details are entirely subordinated. Internally the lighting is principally from the roof, and very successful for a church of this size, though the mode in which it is introduced is such as would hardly be applicable to one on a larger scale.

He built also the now celebrated church of St. George's in the East, from the design of which almost every trace of Classiciality has disappeared; and where the effect is sought to be obtained by grand massiveness of form and detail, accompanied by well-marked, and, it must be admitted, perfectly intelligible, distribution of the various parts of the composition. The result, however, is far from being satisfactory; and the term vulgar expresses more correctly the effect produced than perhaps any other epithet that could be applied to it.

It shows how unsettled men's minds were in matters of taste at this period, that an architect should have produced three such churches so utterly dissimilar in principle: the one meant to be an exact reproduction of Heathen forms; another pretending to represent what a Protestant church in the beginning of the eighteenth century should be, wholly freed from Classical allusions; and the third intermediate between the two, original in form, and only allowing the Classical details to peer through the modern design as ornaments, but not as essential parts of it. It is evident that no progress was to be hoped for in such a state of matters, and that the balance must before long turn steadily towards either originality or towards servility.

Whether Sir John Vanbrugh derived his love of ponderosity from the Dutch blood that is said to have flowed in his veins, or from some accident of taste or education, it was at least innate and overpowering. Whatever his other faults may have been, Vanbrugh had at least the merit that he knew what he wanted;—whether it was right or wrong is another question;—and he knew also how to reach what he aimed at. He never faltered in his career; and from first to last—at Blenheim and Castle Howard, as at Seaton Delaval and Grimsthorpe—there is one principle runs through all his designs, and it was a worthy one—a lofty aspiration after grandeur and eternity. In a better age this might have led to infinite success, and even in his, if applied to the construction of mausolea or temples, where accommodation was not of importance, he would certainly have surpassed all his compeers. But fate decreed that he should only build palaces or country seats, and the result has been a certain amount of gloomy grandeur, coupled with something that looks very like pretentious vulgarity.

Blenheim was to Sir John Vanbrugh what St. Paul's was to Wren—the great opportunity of his life, and the work by which he will be judged and his name handed down to posterity. Of the two, perhaps

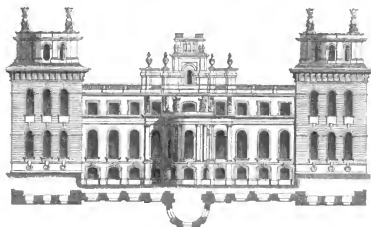


180. Plan of Blenheim Palace. Scale 100 feet to 1 inch.

Vanbrugh's chance was the best. To build a monumental palace in a noble park, on such a scale, and backed by the nation's purse, was at least as grand an occasion as to erect a metropolitan cathedral, hampered as Wren was by liturgical difficulties and critical nobodies.

At first sight Vanbrugh would seem to have been quite equal to the task. Nothing can well be grander than his plan and the general conception of the whole. There is a noble garden front, 323 ft. in extent, flanked on one side by the private apartments, on the other by a noble library 182 ft. in length, and an entrance façade with wings, curving forward so as to lead up to the grand entrance; and beyond these, great blocks of buildings containing the offices, &c.: all forming part of the design, and extending to 850 ft. east and west. In designing his elevation he avoided all the faults that can be charged against Versailles, which was then the typical palace of the day, as well as the tameness which his predecessor had introduced at Winchester and at Hampton Court; yet with all this, Blenheim cannot be called successful. The principal Order is so gigantic as to dwarf everything near it; and as it everywhere covers two stories, it is always seen to be merely an ornament. In the entrance-front especially there is such a confusion of lines and parts as to destroy that repose so essential to grandeur, while the details are too large to admit of their being picturesque; and though the sky-line is pleasingly broken, it is by fantastic and not by constructive elements. If we add to all this that the details are always badly drawn, and generally capriciously applied, it will be easy to understand how even so grand a design may be marred.

The design of the Park front is much more successful than that of the entrance façade, its outline being simple and grand, and the angles well accentuated by the square tower-like masses which terminate them on either hand; its one defect being the gigantic Order of the centre, which is as inappropriate as Michael Angelo's Order at St. Peter's, and producing the same dwarfing and vulgarizing effect.



181.

Lesser Garden Front, Blenheim. Scale 50 feet to 1 inch.

Perhaps the happiest part of the whole are the two lateral façades, each 192 ft. in extent. Their details may be a little too large and too coarse for Domestic Architecture, but the proportions are good, the ornaments appropriate to their situation, and the outline pleasingly broken. The blemish is the want of apparent connection between the rusticated towers at the angles and the plain centre between them. Had the lower storey of the centre been rusticated, or the rustication been omitted from the upper storey of the towers, it would have been easy to bring them into accordance; as it is, they hardly seem parts of the same design.

Internally the hall is too high for its other dimensions; and the library, which is the finest room in the house, is destroyed by the bigness and coarseness of the details. Altogether the palace looks as if it had been designed by some Brobdingnagian architect for the residence of their little Gulliver. There are many things that recall the fact that it is meant for the residence of men of ordinary stature, and as many which make us wonder why an attempt should be made to persuade us that the inhabitants were giants.

Castle Howard is the next in importance of Vanbrugh's works, and, though erected about the same time, is a far more successful design than Blenheim. In plan it is somewhat similar, and looks almost as extensive; but being only one storey high over the greater part, it is in reality much smaller; and its defects arise principally from the fact that Vanbrugh seems to have had no idea of how to ornament a building except by the introduction of an Order, and to have had the greatest horror of placing one Order over another: hence the incongruity of his designs. If the Order of the centre is of the proper proportion, that of the wings must be too small, as the one Order is as nearly as may be double the height of the other, though they are used precisely in the same manner; while from the position and size of the windows we



142.

Elevation of Park Front of Castle Howard.

cannot help perceiving that the rooms are of the same height throughout. At Castle Howard the whole design is much soberer and simpler than that of Blenheim. The eupola in the centre gives dignity to the whole, and breaks the sky-line much more pleasingly than the towers of the other palace. The wings and offices are more subdued; and on the whole, with all Vanbrugh's grandeur of conception, it has fewer of his faults than any other of his designs; and, taking it all in all, it would be difficult to point out a more imposing country house possessed by any nobleman in England than this palace of the Howards.

He was much less successful in his smaller designs, such as Seaton Delaval, Eastbury, or Grimsby, as in these the largeness of the parts and the coarseness of the details become perfectly offensive from the comparative smallness of the objects to which they were applied; and, had we only these to judge from, we might pronounce him to be a successful playwright, but certainly no architect. Castle Howard and Blenheim redeem him from any such reproach, but it can hardly be said that even there he was equal to his opportunities, which were such as seldom fall to the share of an architect in this country.

Contemporary with these men was Colin Campbell, a man of no genius or originality, but of considerable taste, as is shown by his own designs, published in the '*Vitruvius Britannica*,' which prove at all events that he had sufficient sense to appreciate and thoroughly to understand the principles of Inigo Jones's school. The patrons of Architecture in that age seem, however, to have fancied that they had progressed beyond that stage; and as porticoes had become the fashion, nothing would go down without one. In Campbell's designs they are used with as much propriety and taste as the feature is well capable of as applied to a dwelling-house; and he may be said to have fixed the Amresbury type as the mansion of the eighteenth century.

His most celebrated production was Wanstead House, which was long considered as the most perfect example of the class of porticoed houses. Though its design is certainly a mistake, still, if once people get imbued with the idea that a portico means nothing, but that it is so beautiful an object in itself that they are willing their windows



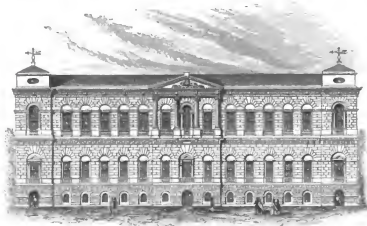
183.

Front Elevation of Wanstead House.

should be inconveniently darkened in order that they may enjoy the dignity it confers, a portico may go anywhere, and be of any size required; but it will never cease to be an offence against all the best principles of architectural design.

The extent of the front at Wanstead was very nearly the same as that of Castle Howard (about 300 ft.); but when we compare the two it must be confessed that even the bad taste of Vanbrugh is infinitely preferable to the tameness of Campbell. His design is elegant, but no one cares to look at it a second time; and though it certainly does not offend, it can hardly be said to please.

Kent¹ was another rather famous architect, of about the same calibre as Campbell; but fortunately for him he was a friend of the Earl of Burlington, who was a man of taste and skilled in Architecture,



184.

The North Front of the Treasury Buildings, as designed by Kent.
The central portion only has been executed.

so that it is difficult to know on the one hand how much of his designs should be assigned to the Earl, and on the other how far the Earl may have been assisted by the practical knowledge of his dependant. Between them they refronted Burlington House as we now see it, in a

¹ Born 1684; died 1748.

manner worthy of the best Italian architects of an earlier day, though it cannot after all be said that there is anything either very grand or very original in the design to justify all the praise that has been bestowed upon it. Between them also they probably designed the northern Park front of the Treasury Buildings at Whitehall, which, if completed, would be more worthy of Inigo Jones than anything that has been done there since his time. The only design that we know to be his own is the Horse Guards, and the less said about that the better. It is tolerably inoffensive, but has little else to recommend it.

Whether it was that he was more fortunate, or that he had more genius, than the two last-named architects, James Gibbs¹ produced two buildings which gave him a higher position among the artists of his country than they can aspire to.



185.

Interior View of St. Martin's-in-the-Fields.

The first of these is the Church of St. Martin's-in-the-Fields, which is certainly one of the finest, if not the handsomest church of its age and class. The octastyle portico of Corinthian columns, 33 ft. in height, and two intercolumniations deep, is as perfect a reproduction of that Classical feature as can well be made; and the mode in which the pilasters are repeated all round suggests a Classical temple to a very considerable extent, if we can persuade ourselves not to see the two stories of windows between them, which however mar the effect considerably. Internally it is a combination of Sir Christopher Wren's arrangement for St. Bride's and St. James's; but overdone, and with the usual objectionable feature of a fragment of an entablature placed

¹ Born 1674; died 1754.

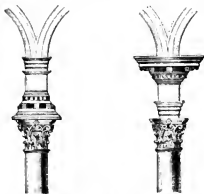
over each column before receiving the arch.¹ This, as before remarked, is frequently seen in Spain, in Italy in the worst days of her Art, and very rarely in France; but wherever it is introduced it is fatal. It must also be added that the ornamentation of the roof throughout is overdone, and not in good taste. Externally, the great defect of the design is the mode in which the spire—in itself not objectionable—is set astride on the portico. Not only does it appear unmeaningly stuck through the roof, but, over so open a portico, has a most crushing and inharmonious effect. Had it been placed alongside, as at Bloomsbury, for which the situation is singularly favourable, not only would the church have reached more nearly the Classical effect to which it was aspiring, but the whole composition would have been very much improved.

Gibbs's other great work was the Radcliffe Library at Oxford. He perhaps cannot be congratulated on his choice of a circular or domical form for the purpose; but if his employers were willing to sacrifice the lower storey wholly for the sake of giving height to the building, and consented to the adoption of a form by which hardly more than half the accommodation was obtained that might otherwise have been the case, he perhaps was not to blame, as in doing so he has produced one of the most striking, and perhaps the most pleasing, of the Classical buildings to be found in Oxford. Its great fault is that nothing in the design in the least degree indicates the purpose to which it was to be applied; and even after all the sacrifices made for effect, he was obliged to introduce two ranges of windows between the columns. The proportions, however, of the whole are good, the details appropriate to their places, and well drawn, so that the building has a monumental and elegant look of which its architect might well be proud.

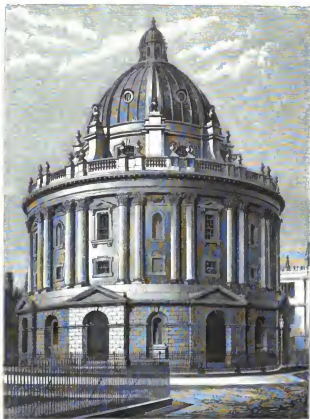
The most successful architect of the latter half of the eighteenth century was Sir William Chambers,² and he was fortunate in having

¹ Had the architects only had the sense to turn the fragment topsyturvy, it would then have been constructively correct. It would in fact have become the Moorish horseshoe arch, and with a very slight modification of detail might have lost much of its offensive character, while it would have ranged as well with anything on the wall. Of course any feature invented for the place would have been better than either; but if Classical features must be used, it is best that it should be done so that they shall be as constructive as the form will admit of.

² Born 1726; died 1796.



186. Diagram showing the effect of reversing the entablature in a pillar.



187.

Radcliffe Library, Oxford. From a Photograph.

an opportunity of displaying his talents in the erection of Somerset House, which was undoubtedly the greatest architectural work of the reign of George the Third.

The best part of the design is the north or Strand front, which is an enlarged and improved copy of a part of the old palace built by Inigo Jones,¹ and pulled down to make way for the new buildings. The width of this front is 132 ft., its height 62, or nearly one half, and it consists of a bold rusticated basement storey more than 25 ft. in height, supporting a range of three-quarter Corinthian columns, which are designed and modelled with the utmost purity and correctness; but we can hardly help regretting that two stories of windows should be included in this Order. The arrangement, however, is so usual and so thoroughly English, that, from habit, it ceases to become offensive;

¹ This has a second time been more literally reproduced in the County Fire Office, Regent Street.



158.

Southern Façade of the Northern portion of Somerset House.

and where the whole is treated with such taste as in this instance, it seems almost unobjectionable. The three arches in the centre which form the entrance into the courtyard occupy quite as much of the façade as ought to be appropriated to this purpose, and constitute a sufficiently dignified approach to the courtyard beyond.

The south front of this portion of the structure is also extremely pleasing; it is so broken as to give great play of light and shade, thus preventing either the details or number of parts from appearing too small for the purposes to which they are applied. The great areas, too, to the right and left of the entrance are an immense advantage, as they allow the two sunk stories to be added to the height of the whole. The same praise cannot be awarded to the other sides of the court, which consist of blocks of building of 277 and 224 ft. respectively, and, being under 50 ft. in height, are proportionally much lower than the entrance-block just described, and far too low for their length. They are besides treated with a severity singularly misapplied. Except small spaces in the centre and at the extremities, the whole is rusticated, even above the level of the upper windows. Such a mode of treatment might be excusable in an exterior of bold outline, though, even then, hardly in conjunction with a Corinthian Order; but a courtyard is necessarily a mezzo-terme between a room and an exterior, and it would generally be more excusable to treat it as if it might be roofed over, and so converted into an interior, than to design it with the cold severity which is so offensive here.

The river front, however, was Chambers's great opportunity, but it unfortunately shows how little he was equal to the task he had undertaken. To treat a southern façade nearly 600 ft. in extent in the same

manner as he had treated a northern one only 132 ft. long, would have been about as great a blunder as an architect ever made. In order to produce the same harmony of effect, he ought to have exaggerated the size of the parts in something like the same proportion; but instead of this, both the basement and the Order are between one third and one fourth less than those of the Strand front, though so similar as to deceive the eye. As if to make this capital defect even more apparent than it would otherwise have been, he placed a terrace 46 ft. wide, and of about two-thirds of the height of his main building, in front of it!

No wonder that it looks hardly as high, and is not more dignified, than a terrace of private houses in the Regent's Park, or elsewhere. This is the more inexcusable, as he had 100 ft. of elevation available from the water's edge, without adding one inch to the height of his buildings, which was more than sufficient for architectural effect, if he had known how to use it. Even with the terrace as it is, if he had brought forward the wings only to the edge of the terrace, and thrown his centre back 50 or 100 ft., he would have improved the court immensely,¹ and given variety and height to the river front, and then, either with a cupola or some higher feature in the centre, the worst defects of the building might have been avoided.

It was evident, however, that the imagination of Chambers could rise no higher than the conception of a square, unpoetic mass; and, although he was one of the most correct and painstaking architects of his century, we cannot regret that he was not employed in any churches of importance, and that the nobility do not seem to have patronized him to any great extent. He had evidently no grasp of mind or inventive faculty, and little knowledge of the principles of Art beyond what might be gathered from the works of Vignola and other writers with regard to the use of the Orders. This may produce correctness, but commonplace designs can be the only result, and this is really all that can be said of the works of Sir William Chambers.

The architects who, in the latter half of the eighteenth century, enjoyed the patronage of the nobility to the greatest extent were the brothers Adam, who, after the publication by Robert² of his great work on Spalatro, acquired a repute for a knowledge of Classical Art which their buildings by no means justified, as in this respect they were certainly inferior even to Chambers. Their great merit—if merit it be—is, that they stamped their works with a certain amount of originality, which, had it been of a better quality, might have done something to emancipate Art from its trammels. The principal characteristic of their style was the introduction of very large windows, generally without dressings. These they frequently attempted to group, three or more together, by a great glazed arch over them, so as to try and make the whole side of a house look like one room! And when they did use Classical Orders or ornaments, they were of the thinnest and

¹ A somewhat similar treatment to that here indicated has, within the last few years, been applied to the western façade by Mr.

Pennethorne, with the happiest result.

² Born 1728; died 1792.

most tawdry class. The façade of the Assembly Rooms at Glasgow is one of the very best specimens of their style, and freer from its defects than most of their designs. In London, there is the Adelphi, so called from being the creation of the four brothers, and two sides of Fitzroy Square, where all their peculiarities come into play. They also designed Portland Place and Finsbury Square, in the latter of which their peculiar mode of fenestration is painfully apparent.

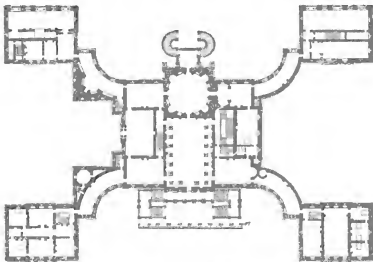
The most important public building intrusted to their care was the College at Edinburgh, the rebuilding of which was commenced in 1789, from a design by Robert Adam. Only the entrance front, however, measuring 255 ft. north and south, was completed in their day. The central court was added about forty years ago, from a design by Playfair. The part erected by Adam is four stories in height, without the least attempt at concealment, and with a cornice at the top, the only fault of which is, that it is not sufficiently bold for its position.



189.

View of the principal Façade of the College, Edinburgh.

The centre is pierced by three bold arches, those on the sides adorned by two monolithic pillars of the Doric Order, one on each side, measuring 26 ft. in height. The whole composition of the centre is bold and monumental, without any feature so gigantic as to crush the wings or to overpower the other parts. It is unfortunately situated in so narrow a street, that it can nowhere be properly seen, and it wants a little more ornament to catch the eye. But we possess few public buildings presenting so truthful and so well-balanced a design as this, and certainly the Adams never erected anything else which was nearly so satisfactory.



190. Ground Plan of Kedleston Hall. From the 'Vitruvius Britannicus.'

Among the country-houses which they built, perhaps their most successful production is Kedleston in Derbyshire, chiefly remarkable for the pleasing manner in which four great blocks of buildings which form the wings are joined to the centre by semicircular colonnades, copied afterwards in the Government House at Calcutta. In other respects, the design is according to the usual recipe—a hexastyle Corinthian portico, standing on a rusticated basement, with three large and three bedroom windows on each side, but with the puzzling peculiarity of having no windows in the centre on either face, the hall being lighted entirely from the roof, and the only communication between the two sides of the house up-stairs being by a concealed passage under the roof of the portico.¹



191. Portion of the Garden Front of Kedleston Hall.

¹ Dr. Johnson's description of this building conveys as correct an idea of its peculiarities as can well be found anywhere. "It would," he says, "do excellently well for a town-hall. The large room with the pillars would do for the judges to sit in at the assizes, the circular room for a jury-chamber, and the room

above for prisoners." Boswell continues: "He thought the large room ill-lighted, and of no use but for dancing in; the bed-chambers but indifferent rooms; and that the immense sum the house had cost was injudiciously laid out." — *Roswell's Johnson*, anno 1777.

Harewood House, in Yorkshire, by Carr of York, is a far better, because a more honest and straightforward specimen, of these porticoed houses of the last century. They are, in fact, so numerous and so thoroughly English and aristocratic, that one is inclined to overlook their defects of style in consequence of their respectability and the associations they call up. It is much more satisfactory to contemplate their easily understood arrangements than the ingenious puzzle of such a design as that of Holkham, where we are left to conjecture whether the noble host and hostess sleep in a bedroom 40 ft. high, or are relegated like their guests to a garret or an outhouse, or perhaps may have their bedroom windows turned inwards on a lead flat. All this may suffice to display the perverse ingenuity of the architect in producing a monumental whole; but both the proprietor and his guests would in the long run probably prefer rooms of appropriate dimensions, and so situated as to enjoy the view of the scenery of the park, or the fresh breezes of heaven.



192.

Façade of Holkham House.

There were probably at least a couple of hundred of these great manorial mansions erected in England and Scotland during the course of the eighteenth century;—more than one hundred are described and illustrated in the '*Vitruvius Britannicus*.' Nine-tenths of them are of stone; one-half at least have porticoes; and all have pretensions to architectural design in one form or other. Yet among the whole of them there is not one which will stand comparison for one moment with the grandeur of the Florentine palaces, the splendour of those of Rome, or the elegance of those of Venice. Their style is the same, their dimensions are equal, their situations generally superior; but from one cause or other they have all missed the effect intended to be produced, and not one of them can now be looked upon as an entirely satisfactory specimen of Architectural Art.

Robert Taylor¹ was the architect who made a larger fortune than any of his professional brethren at the end of the last century, though, judging from his buildings at the Bank of England and elsewhere, there was very little in his art to justify the patronage that was bestowed on him. In this respect he seems to have been inferior to the city architect, Dance, who, in the Mansion House, produced a building, not certainly in the purest taste, but an effective and gorgeous design; and, before it lost the two crowning masses which carried the building

¹ Born 1714; died 1788.

to a height over 100 ft., it really stood proudly and well out of the surrounding masses. His *chef-d'œuvre*, however, was the design for the prison at Newgate, which, though only a prison, and pretending to be nothing else, is still one of the best public buildings of the metropolis.

It attained this eminence by a process which amounts as much to a discovery on the part of its architect as Columbus's celebrated invention of making an egg stand on its end. By simply setting his mind to think of the purposes to which his building was to be appropriated, without turning aside to think of Grecian temples or Gothic castles, a very second-rate architect produced a very perfect building. There is nothing in it but two great windowless blocks, each 90 ft. square, and between them a very commonplace gaoler's residence, five windows wide, and five stories high, and two simple entrances. With these slight materials, he has made up a façade 297 ft. in extent, and satisfied every requisite of good architecture. If any architect would only design a church or a palace on the same principles on which old George Dance designed Newgate, or as an engineer designs a bridge, he would be astonished to find how simple the art of Architecture is, and how easy it is to do right, and how difficult to do wrong, when honestly bent on expressing the truth, and the truth only. From what we know of Dance's character, we are led to suspect that it may have been mere ignorance that led him to do right on this occasion, but it was just this amount of ignorance which enabled every village architect in every part of England to produce those perfect churches which our cleverest and best educated architects find difficulty in copying, and scarcely even dream of emulating.



CHAPTER IV.

CLASSICAL REVIVAL IN ENGLAND.

WITH the commencement of the present century a new feeling came over the spirit of architectural design, which, as suggested above, it may be convenient to distinguish by the name of Revival; inasmuch as it differs essentially from the principles that guided the architects of the Renaissance.

St. Peter's and St. Paul's, though using Classical details, and these only, are still essentially Christian churches; the Escorial and Versailles are the residences of kings of the age in which they were built, and do not pretend to be anything else. No one could ever mistake St. Peter's for a Roman Temple; and Versailles is as unlike the Palace of the Cæsars as any two buildings could well be; and so it is throughout the three centuries during which the Renaissance was practised. But the Walhalla pretends to be an absolute and literal reproduction of the Parthenon; so does the Madeleine of a Roman Temple; and the architect has failed in his endeavours if you are able to detect in St. George's Hall, Liverpool, any feature which would lead you to suppose the building might not belong to the age of Augustus.

This is even more pointedly the case with the now fashionable Gothic style. The Gothic of Wren and his contemporaries was merely the last dying echo of a grand natural phenomenon which had so long been reverberating through the national mind, that it was slow to die away. The revived Gothic is more like the thunder of the stage, got up with all the best appliances of Art, and meant to strike with awe and admiration into the mind of the spectator; and though the true Gothic style is one of the most beautiful and perfect of man's creations, its copy has very little either of the spirit or the merit of the original. Nevertheless an architect is at once condemned if, in any of the numerous churches now being erected, he introduces any feature or omits any detail which would lead you to suspect that his building is not a church suited for the Roman Catholic ritual, and such as might have been erected during the four centuries that preceded the death of Henry VII.

The division of the architects into two separate schools, one following the pure Greek, the other the literal Gothic, is another most important feature which distinguishes the Revival from the Renaissance. It is literally impossible that any man or set of men can continuously profess to obtain two diametrically opposite sets of results, if reasoning from any one set of well-recognised principles; but when

reasoning is entirely put on one side, and mere imitation substituted, it becomes easy. The architects of the Renaissance had a distinct principle before them, which was, how to adapt Classical details so as to make them subservient to modern purposes. To do this, always required thought and invention on their part,—more, in fact, than they frequently could supply. If the Revival architects have a principle, it is that modern purposes should be made subservient to foregone architectural styles. As the Church, at the instigation of the Revivalists, has consented to become pseudo-Catholic in externals in order that its architects may be saved the trouble of thinking, there is now no difficulty, in so far as Ecclesiastical Architecture is concerned. When town-councillors are willing to spend money that they may be lodged like Roman senators, all is easy there too; and an architect only requires to possess a good library of illustrated works in order to qualify himself for any task he may be called upon to undertake.

It is not difficult to trace the steps by which, in this country at least, the change took place. The publication of Dawkins and Wood's 'Illustrations of Palmyra and Baalbec' in 1750 first gave the English public a taste for Roman magnificence, undiluted by Italian design. Adam's 'Spalatro,' published ten years afterwards, increased the feeling, and gave its author an opportunity which he so strangely threw away. But the works which really and permanently affected the taste of the country were the splendid series which commenced by the publication of the first volume of Stuart's 'Athens' in 1762, was continued by the Dilettanti Society, and, after the lapse of nearly a century, was worthily completed last year by the publication of Cockerell's 'Researches at Egina and Bassæ.'

Though Stuart practised as an architect after his return from Greece, he does not seem to have met with much patronage, nor did he then succeed in introducing his favourite style practically to his countrymen. The truth was that, with all its beauties, the Grecian Doric is singularly untractable and ill-suited to modern purposes; and, so long as the principles of the Renaissance prevailed, it could not be applied. It was, however, the beauty of this style and the desire to possess examples of it, created by the enthusiasm which the possession of the Elgin marbles raised in this country towards everything that savoured of the age of Pericles, which eventually led to the substitution of the principles of the Revival for those of the Renaissance.

Once the fashion was introduced it became a mania. Thirty or forty years ago no building was complete without a Doric portico, hexastyle or octastyle, prostylar or distyle in antis; and no educated man dared to confess ignorance of a great many very hard words which then became fashionable. Churches were most afflicted in this way; next to these came Gaols and County Halls,—but even Railway Stations and Panoramas found their best advertisements in these sacred adjuncts; and terraces and shop-fronts thought they had attained the acmé of elegance when either a wooden or plaster caricature of a Grecian order suggested the Classical taste of the builder. In some instances the founders were willing to forego the commonplace requi-

sites of light and air, in order to carry out their Classical aspirations; but in nine cases out of ten a slight glance round the corner satisfies the spectator that the building is not erected to contain a statue of Jupiter or Minerva, and suffices to dispel any dread that it might be devoted to a revival of the impure worship of Heathen deities.

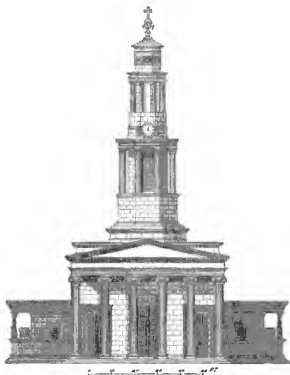
The whole device was, in fact, an easily-detected sham, the absurdity of which the Gothic architects were not slow in availing themselves of. "If," they said, "you can copy Grecian temples, we can copy Christian churches; if your porticoes are beautiful, they belong neither to our religion nor to our country; and your steeples are avowedly unsightly, your churches barns, and the whole a mass of incongruities. Ours are harmonious throughout, suited to Christian worship and to our climate; every part ornamental, or capable of ornament without incongruity; and all suggestive of the most appropriate associations."

The logic of this appeal was irresistible, so far at least as churches were concerned: the public admitted it at once, and were right in doing so. If copying is to be the only principle of Art,—and the Grecian architects have themselves to blame that they forged that weapon and put it into the hands of their enemies,—there is an end of the controversy. It is better to copy Gothic, when we must do so literally, than to copy Greek. But is copying the only end and aim of Art?

If it is so, it is hardly worth the while of any man of ordinary ability to think twice about the matter. Nothing either great or good was ever yet done without thought, or by mere imitation, and there seems no reason to believe that it ever will be otherwise. The only hope is that the absurdity of the present practice may lead to a reaction, and that Architecture may again become a real art, practised on some rational basis of common sense.

There are very few churches in England built during the period of the Revival, in the Classical styles of Architecture, inasmuch as, before the demand for extension of church accommodation began to be extensively felt, the Gothic styles had come into vogue for the purpose. It may also be added, that the churches which were then built were very much after the old pattern;—a portico, of more or less pretensions, with a spire resting on its ridge,—the only novelty introduced being that, instead of a conical spire, an egg-shaped cupola was frequently introduced as more correct; though, like most compromises, it failed in accomplishing the desired object.

The new church of St. Pancras, built between the years 1819 and 1822, may be taken as a typical example of this class, and, in its details at least, goes further to reproduce a Grecian Temple than any other church we possess. The selection of the Order employed in its construction was, however, very unfortunate, as the extreme delicacy of the Grecian Ionic is neither suited to our climate nor to so large a building as this; and details which were appropriate to an Order under 30 ft. in height, become inappropriate when applied to one a third larger. The worst feature of the whole design is, however, the



194.

West Elevation of St. Paneras New Church.

steeple. The idea of putting a small Temple of the Winds on the top of a larger one was a most unfortunate way of designing a steeple, and it was a still greater solecism to place this combination over so delicate a portico as that used at St. Paneras. The introduction also of the caryatid portico on either flank, where they are crushed by the expanse of plain wall to which they are attached, was another very grave error of judgment. Putting on one side for the present all question as to the propriety of adopting Classical details for Christian purposes, it still was an unpardonable mistake to arrange in a formal monumental building of the dimensions of this church the elements of a small, elegant, and playful design, like the Temple of Minerva Polias at Athens, and a still greater one to select so delicate an Order for employment in our climate, to which the Roman Orders were at least more appropriate. All these causes led to St. Paneras new church being acknowledged a failure; and as it cost nearly 70,000*l.*, it contributed more than any other circumstance to hasten the reaction towards the Gothic style which was then becoming fashionable. Internally the building is very much better than it is externally. The difficulty of the galleries is conquered as far as possible by letting their supports

stop at their under side; and all the other arrangements are such as are appropriate to a Protestant church of the first class.

There are several other churches in the metropolis and its neighbourhood, such as those at Kennington and Norwood, which aim at equal purity of Hellenism in style, though less ambitious in design and detail. They are now, however, all admitted to have failed in the attempt to amalgamate the elements of Greek Art with the requirements of a Protestant church in our climate. It is, therefore, of little use adding further criticism to what has already been passed upon them; nor is it necessary to enumerate the churches in similar styles erected in the provinces. The fashion passed as quickly as it arose, and has scarcely left any permanent impress on the Ecclesiastical Architecture of the age.

Turning to Secular Art, we find Sir John Soane¹ as one of the earliest and most successful architects of the Revival. On his return from studying in Italy, he was, in 1788, appointed architect to the Bank of England; and during the rest of his life was occupied in carrying out the rebuilding of that institution, which was commenced there shortly after his appointment. This great design was the subject of his lifelong study, and that by which posterity will judge of his talents.

The task proposed to him on this occasion was very similar to that undertaken by Dance in designing Newgate—to produce an imposing public building without any openings towards the street. But though the latter succeeded perfectly in his design, it is very doubtful how far the same praise can be awarded to Soane.

In the first place, it was an unpardonable mistake to adopt an Order less than 30 ft. high, and standing at one angle on the ground, as the ruling feature of such a design. From the fall of the ground the Lothbury front is about 6 ft. higher,—but even then a height of 36 or 40 ft. along an unbroken front of 420 ft. is contemptible in comparison with Dance's 50 ft. in height along a façade of 300 ft., which, besides, is broken into three well-defined masses. The mistake is the less excusable here, as the Bank was and is surrounded by buildings so high as to dwarf it still more, and to neutralize, both in appearance and in reality, that feeling of security for which the whole design has been sacrificed. It would have been so easy to remedy this, either by raising the whole on a terrace-wall, with a slight batter some 20 ft. in height,—in which case some or all of the blank windows, which are now supposed to be ornaments, might have been opened, to the great convenience of the occupants, as well as to the improvement of the appearance of the building externally; or he might, with a very slight alteration, have used the present block as such a terrace; and, at least over the centre of each front, have raised an upper storey, which would have given dignity and variety to the whole. After these faults of conception the worst feature of the design is the grand entrance, which, strange to say, is only an ordinary three-storied dwelling-house, through two

¹ Born 1750; died 1837.

small doors on the ground floor of which you enter this grand building! On the other hand, the recessed colonnades which flank it, and ornament the centre of the eastern front, are as pleasing features for the purpose as have ever been adopted in a modern Classical building: and, if an Order was to be copied literally—which the new school insisted should be the case—Soane was fortunate in the selection of the Tivoli example for this purpose. The circular colonnade at the north-west angle is a very pleasing specimen of design, as well as most appropriate in overcoming the acuteness of the angle. But the most pleasing part of the whole is the Lothbury Court, which, though small, and having an unfinished look in some parts, is perhaps the most elegant to be found in this country.

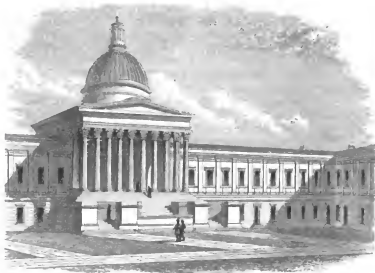


195.

East Elevation of the Bank of England.

In the rest of the interior, as well as in most of his other designs, Soane affected an originality of form and decoration, which, not being based on any well-understood constructive principle, or any recognised form of beauty, has led to no result, and to us now appears little less than ridiculous. Still he took so much pains and bestowed so much thought on some of his designs,—such for instance as the staircase to the old House of Lords—some parts of his own house—the dome of the National Debt Office, and some others,—that it is most discouraging to find that, when a man with such talents as Soane undoubtedly possessed deviated from the beaten path, he should have been so unsuccessful. It probably may have been that he was crotchety and devoid of good sound taste; but it is a strong argument in the hands of the enemies of progress to find such a man succeeding when copying, and failing when he attempts originality.

Holland, Burton, Nash, and one or two others, formed a group of architects who certainly have left their impress on the Art of their country, though whether they advanced the cause of true Architecture or not is not quite so clear. The first-named introduced a certain picturesque mode of treating the classical styles, which promised favourable results, and in his Carlton House certainly was effective. The last-named was in feeling a landscape-gardener, and carried Holland's principles to their extreme verge. The three devoted themselves more especially to Street and Domestic Architecture; and with the aid of a few columns stuck here and there, or rich window dressings and rustications in another place, and aided by the fatal facility of stucco, they managed to get over an immense amount of space with a very slight expenditure of thought. Although none of these buildings will stand the test of separate examination, to their architects is due the merit of freeing us from the dreadful monotony



196.

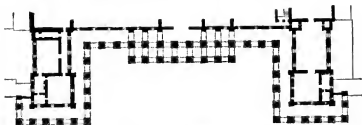
Portico of the London University Buildings, Gower Street.

of the Baker Street style. We can no longer consent to live behind plain brick walls with oblong holes cut in them, and for this we cannot be too grateful.

These men were all more or less true to the old Classical school of Art, though occasionally they indulged in a little bad Gothio, and their Classical designs were more or less tinged with the feelings of the new Romantic school. Wilkins was probably the first who really aspired to pre-eminence in both styles. While he was building the severely Classical College of Downing at Cambridge, he was also building the picturesque Gothic New Court at Trinity College in the same university; and while he was erecting his chef-d'œuvre, the portico of the University College, Gower Street, he was the author of the new buildings at King's College. It is absurd to suppose he could be sincere in both, if he knew what Architecture was; but the feelings of his heart, so far as we can judge, were towards the pure Greek; and in the portico in Gower Street he has certainly produced the most pleasing specimen of its class which has yet been attempted in this country. The stylobate is singularly beautiful and well proportioned; the Order itself is faultless, both in detail and as to the manner in which it stands; and the dome sits most gracefully on the whole, and is itself as pleasing in outline and detail as any that ever was erected, in modern times at least. It is true the porch is too large for the building to which it is attached; but this arises from the wings, which were an essential part of the original design, not having been completed. It is true also that it is useless; but so is a Gothic steeple; and we must not apply the utilitarian test too closely to works of Art. If it were

desired to make the building both monumental and ornamental, it would not be easy to do it at less cost, either in money or convenience, than is attained by the arrangement adopted at University College.

It is to be regretted that this building is so little seen, and that Wilkins's standing as an architect must generally be judged by his having had the bad fortune to obtain the prize of being chosen to erect in the National Gallery one of our largest public buildings and on the finest site in the metropolis. Unfortunately for his fame the prize was coupled with such conditions as to render success nearly impossible. The money allotted to the purpose was scarcely one-half of what was necessary; he was ordered to take and use the pillars of the portico of Carlton House; to set back the wings, so as not to hide St. Martin's Church; and, lastly, to allow two thoroughfares through it! He failed: and we pay the penalty. And most justly so; because we know that Wilkins had talent enough to erect a creditable building if he had had fair play; but the public thought proper to impose conditions which rendered his doing so next to impossible. The sad result to the architect is well known; but on a fair review of the circumstances it does not appear that he was to blame for the painful failure in Trafalgar Square.



197.

Plan of the Portico of the British Museum. Scale 100 feet to 1 inch.

If the British Museum is not more successful than the National Gallery, it certainly is not so from the same causes. No architect ever had a fairer chance than Sir Robert Smirke had here. The ground was free of all encumbrances; the design long and carefully elaborated before execution; and money supplied without stint. If the buildings there have cost a million sterling, which is under the mark, it is no exaggeration to say that half that sum at least has been spent in ornament and ornamental arrangements, and at such detriment to convenience that already they are being abandoned in spite of the money which has been wasted upon them. The courtyard to which the whole building was sacrificed is already gone, and the portico is voted a public nuisance; though it will not be so easily got rid of as the other. Nothing, in fact, can well be more absurd than forty-four useless columns, following the sinuosities of a modern façade, and finishing round the corner;—not because the design is complete—for, according to the theory on which the portico is designed, they ought to be continued along both flanks,—or because they abut on any building—but



198.

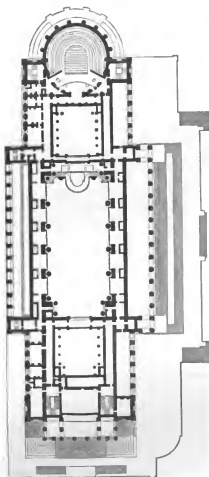
Front View of the Fitzwilliam Museum, Cambridge.

simply because the expense would not allow of its being carried further. As if to make matters worse, a splendid "grille" has been erected in front, so high and so near the spectator, that, as seen from the street, the iron wall is higher and more important than the colonnade. Had the grille been carried back between the two wings of the portico, it would have been pleasing and appropriate. Where it is, its only effect is that of dwarfing what is already too low.

The portico which Basevi erected in front of the Fitzwilliam Museum at Cambridge is very much of the same useless character as this, but much less objectionable: in the first place, because more elegant in detail and better proportioned; in the next, because it does terminate naturally at both ends; and, lastly, because evidently only a Classical screen to hide a building nearly as ornamental behind. A screen is always, of course, objectionable in Art; but if it is determined that the building shall reproduce the effect of a pre-Christian temple or hall, it is perhaps better to cut the difficulty by this means at once than to attempt to mix the ancient and modern together in the hopes of producing a deception which very seldom can be successful.

The culminating, and by far the most successful specimen of this style of Art in England, perhaps in Europe, is St. George's Hall, Liverpool. Its dimensions are, in the first place, superb—420 ft. in length by 140 in width—and ornamented by an Order 58 ft. in height. The centre internally is occupied by one grand hall 169 ft. in length, 85 ft. high, and 75 ft. wide, to which must be added recesses 13 ft. deep on each side. The design of this noble room is adapted from that of

the great halls of the *Thermæ* at Rome, and its ornamentation so rich and tasteful as to make it one of the most splendid structures in Europe. At either end are court-rooms, 60 ft. by 50, opening into it, and beyond, at



199. Plan of St. George's Hall, Liverpool.
Scale 100 feet to 1 inch.

one end, a concert-room 75 ft. deep. The smaller rooms that are grouped round these are so absolutely concealed on the east, north, and south sides, that they do not interfere with the Classical effect; and, on the west, though windows do appear, they are so openly and so appropriately introduced that there is no appearance of meanness on this side, or anything to detract from the splendour of the east front. The principal façade is ornamented by a portico of sixteen Corinthian columns, each 46 ft. in height; beyond which on each side is a "cryptoporticus" of five square pillars, filled up to one-third of their height by screens; the whole being of the purest and most exquisite Grecian, rather than Roman detail. The effect of so simple, yet so varied a composition, extending over 400 feet, with the dimensions quoted above, is quite unrivalled, and produces an effect of grandeur unequalled by any other modern building known. The south front, with its octastyle portico, is very beautiful, but presents no remarkable features of novelty; and its principal merit is that it groups so pleasingly with the

eastern façade, and almost suggests the semicircular termination at the other end.

With these dimensions there is perhaps no other building in modern times which would enable us to compare more closely the merits of Grecian and Mediæval Art. The plan and outline of St. George's Hall is very much that of a Mediæval cathedral; and if we could fancy York, or any other cathedral, without its towers, substituted for it,

we should be able to say which is the most effective. Even in height they are not dissimilar. But the one is a windowless pile, simple in outline, severe from the fowness of its parts, but satisfying the most fastidious tastes from the purity of its details. The other would be rich, varied, and far more cheerful in appearance; depending principally on its windows for its decoration, and making up, to a great extent, for its want of purity, by the appropriateness of its details.



200.

View of St. George's Hall, Liverpool. From a Photograph.

Grange House, Hampshire, which was reconstructed from designs by Wilkins about the year 1820, is not only too characteristic an example of his taste in design, but also of the inappropriateness of the revived Grecian style as applied to Domestic Architecture. Not only do the porticoes add immensely to the expense of such a building without in the smallest degree increasing either its comfort or convenience, but they actually darken the windows, and suggest the arrangement of a class of buildings differing in every respect from the purposes of a nobleman's mansion in an English park. It is no wonder that a reaction soon set in against such a style as this. Wilkins's own designs in Tudor Gothic afforded far more accommodation, for the same expense, and with infinitely more appropriateness and convenience than is found in his Grecian buildings. Though fashion may at one time have induced noblemen to submit to the inconveniences of the pure Classic, the moment the Gothic became as fashionable, there was an end of the first; and it is very improbable that it can ever be revived again in this country, for such purposes at least as we find it applied to at Grange.

There are several buildings in Edinburgh and Glasgow which, though on a smaller scale, must be considered as successful adaptations of Classical Architecture. The most so is perhaps the Royal Institn-



291. Grange House, Hampshire. From Knight's 'Pictorial History of England.'

tion on the Mound at Edinburgh, where the Grecian Doric is used with a freedom, and at the same time a success, not to be found in any other example in this country. The porticoes here cover entrances; the flank colonnades are stopped against blocks which give them character and meaning; and the whole is so well-proportioned as to produce a most satisfactory result. The great defect is its situation being so low as to be looked down upon from the approaches either in front or rear. From George Street the spectator is on a level with the cornice, and so loses all effect of perspective; and from the Castle Hill he has a revelation of skylights and chimney-pots sadly destructive of the illusion produced by the purity of the external architecture. Placed on the Calton Hill, or on any height, it would have been one of the most faultless of modern buildings. Where it is, it fails entirely in producing the effect which is due to the beauty of the design.

The new High School by Hamilton is perhaps even a happier adaptation of the style to modern purposes, though on a less monumental scale, and with far less pretension. The situation, however, is most happy; and the adaptation of the front of the building to the site, and to the purposes to which it is applied, so successful as almost to make us believe that it might be possible really to adapt Greek architecture to modern requirements. A view, however, of the building from the Calton Hill rather dissipates the illusion. Though there is nothing mean about it, it turns out, like the Fitzwilliam Museum, to be merely a modern building behind a Classical screen.

Such indeed seems to be the result of all our modern experience in this direction. Either we must be content with good honest two or



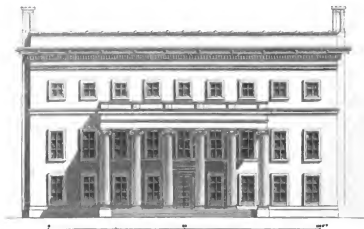
202.

View of the New High School, Edinburgh.

three storied buildings, like the Paris Bourse, the Liverpool Custom-house, or the Leeds Town-hall, adding columns to as great an extent as the front will admit of, and then, like the pheasants with their heads in the brake, trust to no one perceiving that the pillars are not all in all, but that the windows mean something; or we must go to great expense to put up screens and to hide our modern necessities, and hope no one will find us out. This has been nearly accomplished at St. George's Hall, but hardly anywhere else; and after all, supposing it successful, is this an aim worthy of the most truthful and mechanical of the arts?

Sir Charles Barry was almost the only one of the architects of the Revival who seems to have perceived the hopelessness of the path they were pursuing; and if he had been left to follow the bent of his own genius, would probably have set an example that would have had the greatest influence on the style of Art in this country. One of his earliest works was remodelling the façade of the College of Surgeons in Lincoln's Inn Fields. He found it with a very commonplace portico running through two stories, and with an attic above. Instead of trying merely to improve this, he boldly placed a cornicione over the whole, thus reducing the portico to the position of a mere adjunct, and making the whole three stories part of one great consentaneous design. The attempt was so successful, and so like a great discovery, that the wonder is that an attic was ever introduced afterwards; but it is not the province of architects to think at the present day, and, though more rarely than formerly, attics are still introduced.

His next and even more successful design was the southern front of the Travellers' Club, where, by simply grouping the windows together, with a very few ornamental details, he produced one of the most agreeable façades of modern times. His Reform Club was more ambitious and less happy, in consequence of a rather too great leaning towards



203.

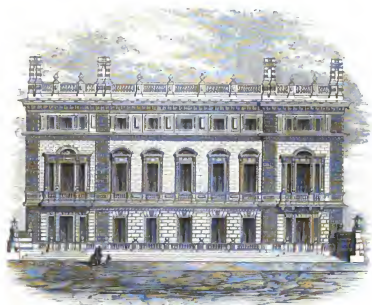
Facade of the College of Surgeons, Lincoln's-Inn-Fields.

the Farnese Palace, which suggested the motivo for the design. The windows are consequently too small for this climate, and the cornicione too solid for the range of windows immediately under it. There is also a degree of monotony in the equal spacing of the windows throughout the two principal façades, which would only be excusable in buildings of a more monumental class than this one can pretend to. The consequence is that the western end, though it can hardly be seen, is by far the most pleasing of the external façades of this Club. Its superiority arises simply from a slight grouping in the windows, a larger plain space being left between the central group of four and the two outer groups of two windows each. It is not much, but even this slight evidence of design goes far to satisfy the mind.

Most of the defects of the Reform Club were remedied by him subsequently when superintending the erection of Bridgewater House, which is very similar in size and arrangements, and shows how much can be done by a little grouping of the windows and taste in the details, with the usual elements of an English nobleman's house, without the useless porticoes which the previous century thought such indispensable adjuncts.

In both these buildings Sir Charles Barry introduced a modification of the Italian Cortile, which was a new feature in buildings in this country, but one perfectly legitimate, and capable of the most pleasing effects. As before remarked, the Cortile is a "mezzo termine" between the architecture of the exterior and that of the rooms in the interior; and an architect is perfectly justified in making it lean either to one side or to the other, as he may desire.

In the instances now quoted, the Cortile being roofed over became a hall; and Sir Charles would have been justified in treating this feature more as a room than he did, and there can be little doubt but that after a few more trials it would have become so, and lost all trace



204.

Park Front of Bridgewater House.

of external architecture. As it is, these two are very pleasing specimens of as monumental a style of treatment as is compatible with internal purposes, and are as scenic features of internal decoration as can be found in this country.

If Barry's design for the Treasury Buildings was not so successful, it was owing to the fact that the task proposed to him here was—similar to that suggested above to improve the Bank of England—to raise a low colonnaded design of Sir John Soane's on a stylobate, and give it the height requisite for accommodation and effect. The Order and all the elements were given to Barry, and he made the best of them; but there is no doubt that he would have done better if less hampered.

While pursuing so successfully this career of introducing common sense into architectural design, Sir Charles Barry was, unluckily for his happiness and fame, chosen architect for the greatest architectural undertaking in this country since the rebuilding of St. Paul's. It was unfortunate for him, as at that time the Gothic mania had become so prevalent that the Parliament determined that their New Palace should be in that style. The plea for this was that it must harmonise with Westminster Hall and the Abbey, though a greater misconception of the true elements of the problem could hardly have been conceived, for both these buildings suffer enormously from their younger and gaudier rival, and would have gained immensely by being contrasted with a modern building in another style. However large and how-

ever ornamental the latter might have been, it could not have interfered with the older buildings in any way; and both would have been great and characteristic truths, instead of one honest truthful Mediæval building being placed in juxtaposition with a mere modern imitation.

Had the architect been allowed to follow the bent of his own mind, he probably would have adopted Inigo Jones's river façade for the palace at Whitehall as the motive of his design. It was exactly fitted, both from design and dimensions, to the situation; and with such changes as the difference of purposes required, or his own taste and exquisite knowledge of detail might have suggested, would have resulted in a palace of which we might well be proud. A dome might then have covered the central hall, instead of the spire as at present; and in that position would have been as effective as the dome of St. Paul's is, when compared with what the spire of Salisbury would have been in its place. The simple outlines of the Victoria and Clock Towers are much more suited to Italian than to Gothic details; and so in fact is the whole building, which is essentially Classic in form and principle, and only Gothic in detail. Being compelled to adopt the Gothic style, the building is anything but a success, for the task of producing a modern palace, with all its modern appliances, and which shall look like a building of another age, and designed for other purposes, has hitherto proved a task beyond any architect's strength to succeed in.

As the buildings of the Parliament Houses however are Gothic, they do not belong to the Classic Revival, and must in consequence be described further on when treating of the Gothic Revival.

CHAPTER V.

GOTHIC REVIVAL.

THE first person who, in England at least, seems to have conceived the idea of a Gothic Revival, was the celebrated Horace Walpole. He purchased the property at Strawberry Hill in 1753, and seems shortly afterwards to have commenced rebuilding the small cottage which then stood there. The Lower Cloister was erected in 1760-61, the Beanelere Tower and Octagon Closet in 1766, and the North Bedchamber in 1770.

We now know that these are very indifferent specimens of the true principles of Gothic Art, and are at a loss to understand how either their author or his contemporaries could ever fancy that those very queer carvings were actual reproductions of the details of York Minster or other equally celebrated buildings, from which they were supposed to have been copied. Whether correct or not, they seem to have created quite a *furor* of Mediævalism among the big-wigged gentry who strutted through the saloons, and were willing to believe the Middle Ages had been reproduced, which no doubt they were with as much correctness as in the once celebrated tale of the 'Castle of Otranto.'

Bad as Walpole's Gothic was, it was better, according to the present definition of the *Revival*, than that which had preceded it, and was directed to a totally different result. Wren and the architects of his age, who may be taken as representing the Gothic *Renaissance*, sought to reproduce the forms and the spirit of the Gothic style, while showing the most profound contempt for its details. The new school aimed at reproducing the details, wholly regardless of either their meaning or their application. The works of Wren at St. Michael's, Cornhill, at St. Dunstan's in the East, or of Hawksmoor at All Saints, Oxford, all show a perfect appreciation of the aspiring and picturesque forms of the style, coupled with an ignorance of or contempt for the details which is very offensive to our modern purists. On the other hand, the towers, the cloisters, or the library at Strawberry Hill are neither defensible, nor monastic, nor Mediæval. It is essentially the villa residence of a gentleman of fortune in the eighteenth century, ornamented with details borrowed from the fourteenth or fifteenth.

It is very necessary to bear this distinction in mind, as it pervades all Gothic designs down to the present day; and is in fact the characteristic, as it is the fatal feature, of the whole system.

The fashion set by so distinguished a person as Horace Walpole was not long in finding followers, not only in domestic but in religious buildings. Although London was spared the infliction, Liverpool and

other towns in Lancashire, which were then rising into importance, were adorned with a class of churches which are a wonder and a warning to all future ages. St. John's, Liverpool, may be taken as a type of the class; but it is not easy now to understand how any one could fancy that a square block with sash windows and the details of this building was a reproduction of the parish churches of the olden time which they saw around them. The idea at that time seems to have been that any window that was pointed, any parapet that was nicked, and any tower that had four strango-looking obelisks at its angles, was essentially Gothic; and proceeding on this system, they produced a class of buildings which, if they are not Gothic, had at least the merit of being nothing else.

The same system was carried into Domestic Architecture, and it is surprising what a number of castles were built which have nothing castellated about them, except a nicked parapet and an occasional window in the form of a cross, with a round termination at the end of each branch. This is supposed to represent a loophole for archery, but on so Brobdingnagian a scale, that the giant who could have used it could never have thrust his body into the pepper-box which was adorned in this singular manner. Generally a circular tower at each angle was thought sufficient, and frequently a little solid "guérite," about 3 ft. in diameter, attached to each angle of the parapet, represented the defensive means of these modern castles. Lambton, Lowther, Inverary, Eglinton, and fifty others, represent this class. The Adams were the greatest of these military architects, and sinned more in this way than any others. They built Colzean Castle, Ayrshire, which, from the circumstance of its situation, is one of the most successful of its class, and really a picturesque dwelling-house, though it would have been far better without its Gothic details, even if Italian were substituted for them.

With the last century this wonderful style was dying out, at least if we may judge from Loudon Castle, built by Elliot, and some other specimens, where mullions were occasionally introduced, and something more like a Gothic feeling prevailed, not only in the details, but the general features of the design. The great impulse, however, that was given to the change was by Beckford, who, under very similar circumstances, repeated at Fonthill what Walpole had done at Strawberry Hill, but with the improved knowledge which the experience of half a century had afforded.

It was about the year 1795 that Beckford was first seized with a desire to build, in the grounds of Fonthill Park, "a convent in ruins," to be a sort of pleasure-house and place of retreat. With the assistance of James Wyatt the building was very rapidly completed; but, being wholly of timber and plaster, it tumbled down before it was well finished, but only to be commenced on a larger scale, and with more durable materials. In 1807 it was so far complete that its owner went to reside in it, and the old mansion-house was abandoned. In 1812 the east wing was commenced, and the works progressed with little interruption till nearly 1822, when the place was sold and dismantled, only to tumble down again and nearly to murder its new master.



205.

View of Fonthill Abbey, as it was in 1822.

During the progress of the works the greatest mystery was kept up. No one was admitted to see them; and the consequence was, that, when thrown open, in 1822, every one rushed to see the place, and to wonder at its almost eastern magnificence, and the more than eastern disregard of common sense shown in its arrangements. Most of the defects of the design arose from its being built to resemble an abbey; but that was a part of the system. It was necessary that it should be either a church, or a castle, or a college, or something of the sort; and many of the errors in proportion arose from the expansion of its designer's ideas during the thirty years that the works were in progress. But notwithstanding this, it was by far the most successful Gothic building of its day, more Mediæval in the picturesque irregularity of its outline, more Gothic in the correctness of its details, than any which had then been erected. With all its faults, no private residence in Europe possessed anything so splendid or more beautiful than the suite of galleries, 300 ft. in length, which ran north and south through the whole building, only interrupted by the great octagon, whose sole defect of design was being too high for its other proportions, and for the apartments which led into it. Its faults either of detail or design were so infinitely less than those of any other building which had been erected at that time, that the public did not perceive them, while its beauties were so much greater, that all the world jumped at once to the conclusion of the infinite perfectibility and adaptability of Gothic

Architecture to all purposes. The discovery, as it was then thought to be, was hailed with enthusiasm, and nothing was thought of or built but Gothic castles, Gothic abbeys, Gothic villas, and Gothic pigsties! Wyatt, whose fairy creation was the cause of all this hubbub, did not live to reap the benefit of it. Very few original churches or palaces are to be found of his design, but he was most extensively employed in restoring and refitting those which did exist. What he did with the cathedrals intrusted to his care we now know to have been deplorable, though he is hardly to blame for this. Classical feelings were not then dead, and men longed for Classical effects in Gothic buildings, and funds were generally so sparingly supplied that stucco had often to be employed to replace decayed stonework. But with all this, it was a good work begun, and not before it was wanted. Since that time we have become wonderfully critical, but it is mainly to Wyatt and his contemporaries that we owe the origin of the present movement, and of the work of restoration which is now being so enthusiastically carried out.¹

Though Wilkins was evidently Classical in his art taste, he probably built more in the Gothic than in the Classical style; and although his works do not show any real grasp of the principles of Mediæval Art, his designs are free from most of the faults which are to be found in those of the architects who preceded him. He neither built abbeys nor castles for his clients to live in, nor did he ever range beyond the one form of Gothic Art which was most suitable for domestic purposes. Taking for his models the Tudor mansions which remain, especially in the eastern counties, he rearranged the parts and modified the position of the details so as to suit his purposes, and to give a sufficient appearance of novelty to his designs, and generally with a fair amount of success.

The furore set in just when Nash was in the height of his fame and in the full swing of his practice, and he too was called upon to furnish Gothic castles for his admirers. Nothing was easier. In the true spirit of a modern architect, and with all the energy of a man of business, Nash was prepared to build pagodas, pavilions, Grecian temples, Gothic churches, Gothic castles, or abbeys, suited either for suburban residences or manorial dwelling-places—anything at any price; for if stone and brick were too dear, brick noggings and lath and plaster or stucco would produce the most splendid effects at the least possible price! The things which were done in these days are wonderful in

¹ We are now horrified at what Wyatt did with our cathedrals, and full of wonder at the blindness of our fathers in not perceiving how wrong he was. Do we feel quite sure that our children will not be equally shocked at what we are now doing with the same buildings? Are not the honest changes made by Wyatt preferable to the forgeries of the architects of the present day? Who will in future be able to tell what was the work of our forefathers in the "great days of old," or what

was concocted by a committee in a back parlour of an architect's office, and carried out, not because it was the best to be done, but because it was all their funds would admit of?

Whatever may be the case in this country, it is quite certain that the French architects of the present day are worse than all the Wyatts that ever existed since the world began; and he is lucky who saw France before the so-called work of restoration was commenced.

our eyes, and soon produced a reaction in favour of the present state of things, but a reaction that could hardly have been effected but for the labours of a class of artists who, though not strictly speaking architects themselves, have furnished the profession with the materials which they are now using with such effect.

The most remarkable among these men was John Britton, who for more than half a century laboured with most unremitting zeal in publishing the splendid series of works which bears his name. The principal of these were 'The Architectural Antiquities of Great Britain,' commenced in 1805, and 'The Cathedral Antiquities of England,' begun in 1814 and completed in 1835, besides some fifty or sixty other works, all bearing more or less directly on this favourite subject. To these succeeded the works of the elder Pugin, who supplied by accurate detailed measurements the information which Britton's works had given in a more picturesque form; Le Keux, the engraver, and a host of other men lent their aid during the first quarter of this century; so that, before the next stage was reached, not only was an architect inexcusable who did not employ correct details in his work, or who used them incorrectly, but the public had become so learned and so fastidious that any deviation from authority was immediately detected, and an architect guilty of this offence at once exposed and condemned.

Rickman was perhaps the man who did more to popularize the study than even those laborious men above named. By a simple and easy classification he reduced to order what before was chaos to most minds; and, by elevating the study of an art into a science, he not only appealed to the best class of minds, but gave an importance and an interest to the study which it did not possess till the publication of his works.

These works, together with the experience gained during the first thirty years of this century, had laid the foundation for a perfect revival of Gothic Art, should such be desired, when an immense impulse was given to the attempt by the writings and works of the younger Pugin. He set to work to reform abuses with all the fire of a man of genius, which he undoubtedly was, and all the still fiercer intolerance of a pervert from the religion of his forefathers. According to him, whatever was modern or Protestant was detestable and accursed; whatever belonged to the Middle Ages or his new religion was beautiful and worthy of all reverence. Unfortunately for us, this simple creed had been adopted at that time by a large and most influential section of the Church of England, who, shocked at the apathy and indifference which prevailed, hit upon this expedient for rousing the clergy and recalling attention to the offices of religion. Many, like Pugin, fell victims to their own delusions, and have gone over to Rome, but not before they had leavened the whole mass with a veneration for the fourteenth century and its doings, and a pious horror for the nineteenth, in which, unfortunately, they have been born, and in which they and we must live.

If copying correctly is really the only aim and purpose of Architectural Art, Pugin had some reason on his side when he said to his

co-religionists, "Let us choose the glorious epoch before the Reformation as our type, and reproduce the gorgeous effects of the Middle Ages, before the accursed light of reason destroyed the phantasma of that massive darkness." With less perfect logic he appealed to the boasted immutability of the Church; forgetting that, in so far as Architecture was concerned, it had been one series of continuous, unresting change, from the age of Constantine to this hour. During fifteen centuries progress in Art had been her watchword; Pugin was the first to ask her to step backwards over the last four.

The appeal to Protestants was still more illogical. Why should we deny the Reformation? Why should we be asked to ignore all the progress made in enlightenment during the last four centuries? Why should we wish to go about wearing the mask not only of Catholics, but of Catholics of the Dark Ages? The answer was clear, though a little beside the question. You are now trying to reproduce Pagan forms and Pagan temples; why not produce Christian forms and Christian churches? It required a deeper knowledge of the subject than is possessed by most men to give a satisfactory answer to this appeal. The Classic architects themselves had introduced the principle that copying was the only form of Art; and if men must copy, they certainly had better copy what is Christian, and what belongs to their own country, than what belongs to another country and to another religion altogether. The error was that both were only on the surface, and so completely wrong that they had no right to impugn each other's principles, and had no *point du départ* from which to reason. The consequence was that neither Pugin nor his antagonists saw to what their practices were tending. Every page of Pugin's works reiterate, "Give us truth,—truth of materials, truth of construction, truth of ornamentation," &c. &c.; and yet his only aim was to produce an absolute falsehood. Had he ever succeeded to the extent his wildest dreams desired, he could only have produced so perfect a forgery that no one would have detected that a work of the nineteenth century was not one of the fourteenth or fifteenth. They have not yet, and, if there is anything in the theory of morals, they never can succeed; but there are few more melancholy reflections than that so noble and so truthful an art as Architecture should now be only practised to deceive, and that it has no higher aim than the production of a perfect deception.¹

¹ The true bent of Pugin's mind was towards the theatre, and his earliest successes achieved in reforming the scenery and decorations of the stage; and, throughout life, the theatrical was the one and the only branch of his art which he perfectly understood. The circumstance which would have brought his inherent madness earliest to a crisis would have been if he could have seen Garrick play Richard the Third in knee breeches and a full-bottomed wig; and we cannot but regret that he died before enjoying the felicity of seeing Charles

Kean perform the same character with all the perfection of stage properties which he introduced. Both these great men devoted their lives to the same cause, and with nearly equal success. What Kean did for the stage, Pugin did for the church. The one reproduced the drama of the Middle Ages with all the correctness and splendour with which it was represented at the Princess's Theatre, and with about the same amount of reality as the other introduced into the building and decoration of the mediæval churches of the nine-

Notwithstanding all this, there were certain obvious advantages to be gained by the introduction of Gothic Architecture in church-building in preference to Classic, which were almost certain—in the state in which matters then were—to insure its being adopted.

The first of these was, that when applied to a modern church every part could be arranged as originally designed, and every detail used for the purpose for which it was originally intended. It required, therefore, neither ability nor thought on the part of the architect to attain appropriateness, which is one of the principal requisites of a good design.

In using the Classical style, it required the utmost skill and endless thought to make the parts or details adapt themselves even moderately well to the purposes of Modern Church Architecture. With Gothic, every shaft, every arch, every bracket was designed absolutely for the place in which to be again employed; and it was only so much the better if there were neither thought nor originality in the mode in which they were applied.

A second advantage was the almost infinite variety of forms that could be selected from Mediæval buildings, as compared with the limited *repertoire* of the Classical architect. Practically the latter was restricted to five Orders, the dimensions, the details, and the ornaments of which had been fixed immutably by long custom, and could not now be altered.

The Gothic architect, on the other hand, had windows of every shape and size, pillars of every conceivable degree of strength or tenuity, arches of every span or height, and details of every degree of plainness or elaboration. He had, in fact, a hundred Orders instead of five, and as, according to the canons now in force, he is not answerable for their elegance or beauty, his task is immensely facilitated by the richness of materials.

A third, and perhaps even more important advantage of the Gothic style is its cheapness. In a Gothic building the masonry cannot be too coarse or the materials too common. The carpentry must be as rude and as unmechanically put together as possible; the glazing as clumsy and the glass as bad as can be found. If it is wished to introduce a painted window into a church of a Classical design, you must employ an artist of first-rate ability to prepare your cartoon, and he will charge you a very large sum for it; and it may cost as much more to transfer the drawing to the glass. Any journeyman glazier earning his guinea to two guineas a week is good enough to represent the sublimest mysteries of the Christian religion, or the most solemn scenes of the Bible history, on the windows of a Gothic church. The Mystery

teenth century; but so enchanted was Pugin, and unfortunately many others, that they have forsaken the religion of their forefathers to enjoy the pomp and splendour of this mediæval reproduction. It is no doubt very beautiful; but, as Protestants, perhaps we may be allowed to ask whether all this

theatrical magnificence is really an essential part of the Christian religion, and whether the dresses and decorations of the Middle Ages are really indispensable for the proper celebration of Divine worship in a Protestant community in the nineteenth century?

of the Trinity, or the most affecting incidents of the Passion, are represented every day in this country in a manner that makes one shudder, and the surprising thing is that people of refinement are not offended by such barbarous exhibitions.

A fourth advantage that told very much in favour of the Mediæval styles was, that contemporaneously with their re-introduction the feeling arose that both ornament and ornamental construction were indispensable in Church Architecture. Pillars were introduced in the interiors where they impeded both seeing and hearing, and towers were placed in the intersections where they endangered the construction; but they were thought beautiful, or at least correct, and no one complained. In like manner chancels were introduced for effect, galleries and pews were abolished, coloured marbles, stained glass, painted ceilings, and decorations of every class were added. All these were assumed most erroneously to be parts of the style, but nine-tenths of them would have been as applicable, and possibly more effective, in any other.

During the Renaissance period, though the architect was sometimes allowed to ornament his construction, he was very rarely allowed to construct ornamentally. In almost all cases his church must be a rectangular room, a fourth or a fifth longer than its width; and the most essential condition of his instructions always was, that no space must be wasted, but that his building must be so arranged as to accommodate the largest possible congregation, and in doing so to take care that all shall see and hear perfectly. Pews and galleries are consequently insisted upon. Colour was not tolerated; and if plaster would do, no architect was allowed to use a more costly material. Under these circumstances, no fair comparison can be drawn between the two styles as practised in this country.

In addition to all this, it must be borne in mind that at the time of the Revival the public began, for the first time for nearly three hundred years, to take a real interest in architectural matters. Not only are the clergy now generally very well versed in Gothic Architecture, but so also are the bulk of the better classes in their congregations. Together they not only take an unusual interest in the construction of a new church, or the restoration of an old one; but they are able to guide and control their architect, to judge who is really the best skilled man for their purposes, and to see that his design is up to the mark and that he does his work efficiently.

In the Renaissance times the vestry and the churchwardens settled who was to build their church, and the sum he was to spend upon it. That done, the architect was left to his own devices. No one cared much, or could judge, what his design might be like, till it was too late to alter it; and when it was finished, they contented themselves with criticising it, without seeking to remedy its defects.

If the idea of introducing a new style had taken possession of the public mind at the same time that it adopted the Mediæval, and if a Modern style of Art had been fostered under the circumstances which have just been enumerated as so favourable to the progress of the

Gothic, we may feel sure that we should by this time have created a style worthy of the nineteenth century, and that we should laugh in astonishment at any man who would now propose to erect a church or other building after the pattern of the Middle Ages.

If we add to these advantages the knowledge of the fact that the rising generation of architects work infinitely harder, and take far more interest in their work, than did the easy-going gentlemen of the last generation, and that a class of art-workmen are fast springing up to aid them in carrying out their designs, it will be easily understood with what advantage the Gothic style starts on its competition with the Classic, in so far at least as Church Architecture is concerned. When all this coincides with a strong bias of religious feeling, the pure Classic may be considered as distanced for the time, and never, probably, will be able to compete with the Mediæval again; and the common-sense style is not yet born which alone can free us from the degrading trammels of either.

Before Pugin took the matter in hand, considerable progress had been made towards producing correct Gothic churches. The model generally adopted was Bishop Skirlaw's chapel, at the village of that name in Yorkshire, which was published, with illustrations, in the fourth volume of Britton's '*Architectural Antiquities*.' Like the model, most of these churches were in the Perpendicular style of Gothic, which was then thought the most essentially constructive and elegant form, in so far especially as window-tracery was concerned; and such churches as St. Luke's, Chelsea, the York Place Chapel, and the Cathedral at Edinburgh, the Roman Catholic Cathedral, Glasgow, and many others which every one may recall, belong to this style. These are all Gothic in their details, and correct enough in this respect; but all fail in being essentially Protestant in their arrangements. None of them have deep chancels, in which the clergy can be segregated from the laity. They have no sedilia, no reredos, nor any of those properties now considered as essential; worse than this, they have generally galleries, which, though affording a greatly increased accommodation to the congregation, are now not tolerable; and where painted glass is introduced, good drawing and elegant colouring have been employed, after the fashion of Sir Joshua Reynolds's window at New College, Oxford, or West's at Windsor;—all which are very incongruous with the aim of Architecture in the present day.

If we compare the two rival churches of St. Luke's, Chelsea, and St. Pancras (Woodcut No. 194), which were being erected simultaneously in London, and both in dimensions and arrangements are very similar to one another, we shall find very little to choose between them according to the present doctrines. It is the custom to call St. Pancras Pagan, and consequently detestable; but not even the most blind partizan can fail to see in it that it is a Protestant place of worship of the nineteenth century, which is all it pretends to be. It is not a good design, as was pointed out above, and unnecessarily expensive; but it fulfils all the conditions its designer intended, with as much success as

St. Luke's; and, as that is now rejected as un-Gothic by the purists of the present day, it really becomes a question, in so far as these two churches are concerned, whether the Gothio or the Grecian ornament is the most elegant, or which is capable of producing the best effect at a given cost. The one is not a Temple, though it pretends to be; and the other is not a Mediaeval church, though its architect fancied it might be mistaken for one; and they can only, therefore, be classed as failures, with little to choose between them.

Before this last church, however, was completed, the public had be-

come sufficiently instructed, through the labours of Britton, Rickman, and others, to see it was not Gothic, and demanded of the architect something more correct. Nothing was easier. Every library furnished the requisite materials, every village church was a model; neither thought nor ingenuity was required. Any man can learn to copy, and every architect soon learned to do so. So that now there is not a town, scarcely a village, in the length and breadth of the land, which is not furnished with one of these forgeries; and so cleverly is this done in most instances, that, if a stranger were not aware that forgery is the fashion instead of being a crime, he might mistake the counterfeit for a really old Mediaeval church. There are none of them, however, which possess sufficient merit of their own to make it a matter of regret that they cannot be particularized in this place.

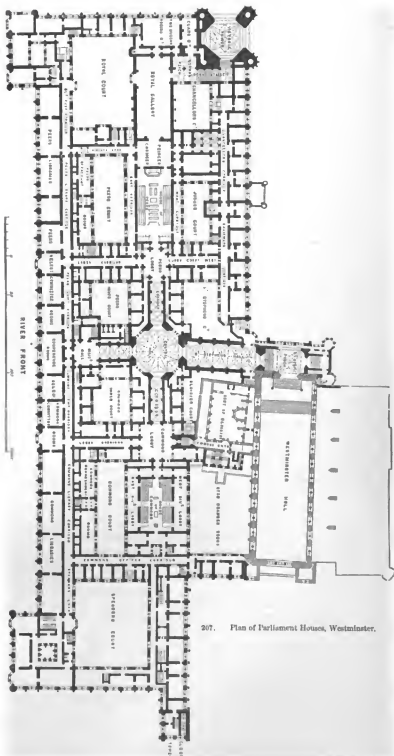


206. West Front of St. Luke's, Chelsea.

It would be as tedious as uninteresting to enumerate even a tenth of the fierce castles or secluded abbeys, the Tudor palaces, the Elizabethan mansions or monastic villas, that, during the last forty years have been built in this wealthy but artless land. There may be much to enjoy, but there is little to admire, in these enrious productions. For our present purpose it will only be necessary to allude to three great secular public buildings, which sufficiently illustrate the recent progress and present position of the art.

The first of these is Windsor Castle, where restorations, amounting almost to a rebuilding, were commenced in 1826, under the superintendence of Sir Jeffrey Wyatville. Nothing could be more legitimate than the operation then attempted. The palace had been very much degraded by alterations at a period when Gothic Architecture was despised, and the question arose, when it was again determined to fit it as a Royal residence, whether to persevere in modernizing it, or to restore it in the style in which it was originally built. The former course was hardly possible without almost pulling the castle down and rebuilding it; and nothing could well have been more happy than the mode in which the second plan was carried out. Instead of attempting to make it, like some modern castles, as if it really was intended to defend it with bows and arrows against some ancient enemy, Sir Jeffrey boldly adopted the idea of making it appear as if it was an ancient building fitted for a Royal residence in the nineteenth century; but he did so using only—externally at least—the details and forms of the age of the Edwards and Henrys, so that the eye of the artist is not offended by any incongruities, and the man of common sense knows that it is a palace, and a palace only, that he is looking at. With these elements he not only retained, but improved, the Gothic outline of its original builders, and added a magnificence they were incapable of conceiving. Internally he was not so fortunate,—partly to meet the views of his Royal patron, and it may be also that funds sufficient were not available, but there is a poverty about some of the apartments, and a Belgravian drawing-room air about others, which is hardly worthy of the place. It must, however, be added that few architects could devote to the task time sufficient to design the details of every room separately, and there did not then exist a class of qualified assistants capable of taking the trouble off his hands. Notwithstanding all this, no modern building of the class has so good an excuse for adopting a Mediæval guise, or wears it more artistically, than this; and no one more happily combines the luxury and convenience of a modern palace with the castellated form which the barbarous state of society forced on our forefathers.

The second great building alluded to above is the Houses of Parliament. Here it was determined to go a step further. Not only the exterior, but every room and every detail of the interior, was to be of the Tudor age. Even the sculpture was to be of the stiff formal style of that period: Queen Victoria and her royal uncles and ancestors from Elizabeth downwards were all to be clothed in the garb of the earlier period, and have their names inscribed in the illegible characters then current. Every art and every device was to be employed to prove that history was a myth, and that the British sovereigns from Elizabeth to Victoria all reigned before the two last Henrys! Or you are asked to believe that Henry VII. foresaw all that the lords and commons and committees would require in the nineteenth century, and provided this building for their accommodation accordingly. The Hindoos were actuated by the same childish spirit when they wrote their past history in the prophetic form of the Puranas. The trick hardly deceives even the ignorant Indian, and does not certainly impose on any Englishman.



Apart from this absurdity, for which the architect was not responsible, the building can hardly be called a success at all commensurable with its dimensions or the richness of its decorations. An architect of Sir Charles Barry's taste and knowledge could hardly have failed to perceive that a certain amount of regularity and symmetry was indispensable to the dignity of a great building, and that frequently it was allowable to sacrifice internal convenience to a certain extent in order to obtain this; and generally that it was better to do so than to thrust forward every engineering or domestic exigence exactly where it may be most conveniently situated, in order to get that class of truthfulness which it is now so much the fashion to clamour for. It may however be the case that Barry did carry the principle too far when he made the Speaker's House and Black Rod's apartments exact duplicates of one another, and made both of the same ordinance as the libraries



206.

River Front of the Parliament Houses. From a Photograph.

and committee-rooms between them. But having once adopted this principle of design, there can be no doubt but that it should have been carried out in all parts of the building; and it was unpardonable to adopt three towers of such different design as those which form the principal features of the structure, and to arrange them so unsymmetrically as has been done.

Following out the principle of the river front, the central dome ought beyond all question to have been the principal feature of the design, and nothing could have been easier than to make it so. Its cross section now is 70 ft. externally; that of the Victoria Tower 62, exclusive of the angle towers. That of the Octagon could easily have been increased to any desired extent; and if the four galleries that lead into it had been raised so as to be seen above the ordinary level of the building, and the Octagon with its increased base carried

100 ft. higher, the whole design would have gained immensely in dignity.¹

As it now is, the Victoria Tower is 325 ft. high to the top of the vane; the Clock Tower 314; but the central Octagon only 266, and terminates upwards in a much more attenuated form than the other two.

Besides this defect in the general arrangement of the design, the position of the Victoria Tower as it now stands has a fatal effect in dwarfing those portions of the building in immediate contact with it.

In the original design this tower was intended to be of six stories in height, each storey four windows in width, and with no feature larger than those of the edifice to which it was attached. Had this been adhered to, the tower would have been much more beautiful than it now is, but, owing to an unfortunate peculiarity of the architect's mind, he never remained satisfied with his original designs, though these were generally wonderfully perfect. The consequence was that the entrance to the tower, instead of being only the height of two stories of the building, as was first proposed, now rises through all four, and makes the adjacent House of Lords absolutely ridiculous. If the size of the gateway is appropriate, the Lords are pignies. If they are men of ordinary stature, the gateway is meant for giants. Worse than this, at the back of this great arch is a little one, one-fourth its height, through which everything that enters under the large arch must pass also.² Unfortunately the whole tower is carried out on the same system. The six original stories are enlarged into three, and all their parts exaggerated. The result of this is that the tower looks very much smaller than it really is, and it is difficult indeed to believe that it is as high as the dome of St. Paul's; but the effect of this exaggeration in the adjoining façade is even more disastrous. It would perhaps be difficult to produce in the whole range of Architecture a more exquisite piece of surface decoration than the façade of the House of Lords, from the tower round the end of Westminster Hall to the Law Courts; but as it has no horizontal lines sufficient to give it shadow, it wants vertical breaks to give it dignity and strength. This could easily have been supplied by making the entrance to the House of Lords higher, and by raising it also the architect would have given dignity and meaning to the whole; but by placing a long unbroken line of building in immediate juxtaposition with an exaggerated vertical mass, he has done all that was possible to destroy two things which his own exquisite taste had rendered beautiful in themselves.

Internally nothing can well be happier than the mode in which Barry appropriated Westminster Hall and its cloister as the grand entrance to the Parliament Houses; and the four great arteries meeting in a central octagon were also well worthy of his genius. We may bitterly regret that a fatal love for uniformity led him to destroy the beautiful chapel of the Edwards; and we may also regret the adoption

¹ This arrangement is the great charm of the design of Fonthill Abbey (Woodcut No. 205), though there it is marred by exaggera-

tion in the opposite direction.

² The clear height of the external archway is 50 ft.; of the internal 15 ft.



209.

New Museum at Oxford. From a Photograph.

of a style in many respects unsuitable for the purposes to which these buildings are applied. But taking it all in all, it is perhaps the most successful attempt to apply Mediæval Architecture to modern civic purposes which has yet been carried out; and barring the defects in conception pointed out above, it is probable that the difficulties of the attempt were so great that we can hardly expect to see another which shall be more successful.

The third building chosen to illustrate the downward progress of the art is the New Museum at Oxford. This was designed to be Gothic in conception, Gothic in detail, and Gothic in finish. Nothing was to betray the hated and hateful nineteenth century, to the cultivation of whose sciences it was to be dedicated. Unfortunately the style selected on this occasion was not English Gothic, for, the architects having exhausted all the specimens found in their books, and, according to the new canons of Art, being obliged to be original without being allowed to invent, they have latterly in consequence been forced to borrow from Germany or Lombardy such features as are yet new to the English public. Generally speaking, these foreign forms and details are neither so beautiful nor so appropriate as our own; but if the architect can produce a certificate of origin, and prove that he has copied and not invented them, the public are satisfied that all the exigencies of true Art have been complied with.

The roof of the Great Central Hall of the Oxford Museum, and the iron-work that supports it, are made purposely clumsy and awkward. The Lecture-rooms are cold, draughty, and difficult to speak in. The Library is a long ill-proportioned gallery, with a rudely constructed roof, painted in the crudest and most inharmonious colours; the windows glazed in the least convenient manner with the worst possible glass;

and the bookcases arranged, not to accommodate books, but to look monkish. You take a book from its press, and are astonished to find that men who could spend thousands on thousands in this great forgery have not reprinted Lyell's 'Geology,' or Darwin's 'Origin of Species,' in black letter, and illuminated them, like the building, in the style of the thirteenth century. It is to be hoped that no stuffed specimen of the modern genus *Felis* will be introduced into the museum, or we may lose the illusion to be gained from contemplating the long-backed specimens of the Mediæval species which crawl round the windows of the Library in such strangely pre-historic attitudes. The one really good point in the whole design is the range of pillars with their capitals which surround the inner court; but they are good precisely because they are not Gothic. The shafts are simply cylinders of British marbles; the capitals adorned with representations of plants and animals, as like nature as the material and the skill of the artist would admit of, and as unlike the Gothic cats of the façade as two representations of the same class of objects can well be made. On wandering further you enter what seems a kitchen of the age of that at Glastonbury, and find a professor, not practising alchemy, but repeating certain experiments you believe to be of modern invention; and the only relief you experience is to find that his thermometer and barometer and other instruments must, from the style of their ornaments, belong to an age long anterior to that when those impostors Torcelli, or Galileo, or Newton, are said to have invented these things.

If the student of Architecture gains but very little gratification in an artistic point of view from a visit to the Oxford Museum, he may at least come away consoled with the reflection that the Syndics of that learned University have gone far in producing a *reductio ad absurdum*; and that a system which results in such a mass of contradictions and *niaiserie*s as are found here is too childish long to occupy the serious attention of grown-up men, and when the fashion passes away we may hope for something better. Till it does, Architecture is not an art that a man of sense would care to practise, or a man of taste would care to study.

The great lesson we have yet to learn before progress is again possible is, that *Archæology is not Architecture*. It is not even Art in any form, but a Science, as interesting and as instructive as any other; but from the very nature of things it can neither become an art, nor in any way take the place of one. Our present mistake is, first, in insisting that our architects must be archæologists; and fancying, in the second place, that a man who has mastered the science is necessarily a proficient in the art. Till this error is thoroughly exploded, and till Architecture is practised only for the sake of supplying the greatest amount of convenience attainable, combined with the most appropriate elegance, there is no hope of improvement in any direction in which Architecture has hitherto progressed.

As the case at present stands, the Gothic style has obtained entire possession of the Church: and any architect who would propose to

erect an ecclesiastical edifice in any other style would simply be laughed at. It is employed also, exclusively or nearly so, for schools and parsonage-houses—generally, wherever the clergy have influence this style is adopted. If it is true that the Gothic period was the best and purest of the Christian Church, and that we are now in this respect exactly where we were between the thirteenth and fifteenth centuries, this is perfectly logical and correct; but if we have progressed, or been refined, or take a different view of these matters from the one then taken, the logic will not hold good; but this the architect is not called upon to decide.

On the other hand, the Classical styles still retain a strong hold on town-halls and municipal buildings. Palaces are generally in this style, and club-houses have hitherto successfully resisted the encroachments of the enemy; and but very recently all the domestic and business buildings of our cities were in the non-Gothic styles. In this country, mansions and villas are pretty equally divided between the two, and it is difficult to estimate which is gaining ground at this moment. Generally it may be said that the Gothic is the style of the clergy, the Classical that of the laity; and though the buildings of the latter are the most numerous, those of the former are the most generally architectural.

For the philosophical student of Art it is of the least possible consequence which may now be most successful in encroaching on the domains of its antagonist. He knows that both are wrong, and that neither can consequently advance the cause of true Art. His one hope lies in the knowledge that there is a "*tertium quid*," a style which, for want of a better name, is sometimes called the Italian, but should be called the common-sense style. This, never having attained the completeness which debars all further progress, as was the case in the purely Classical or in the perfected Gothic styles, not only admits of, but insists on, progress. It courts borrowing principles and forms from either. It can use either pillars or pinnacles as may be required. It admits of towers, and spires, or domes. It can either indulge in plain walls, or pierce them with innumerable windows. It knows no guide but common sense; it owns no master but true taste. It may hardly be possible, however, because it requires the exercise of these qualities; and more than this, it demands thought, where copying has hitherto sufficed; and it courts originality, which the present system repudiates. Its greatest merit is that it admits of that progress by which alone man has hitherto accomplished anything great or good, either in Literature, in Science, or in Art.

BOOK V.—GERMANY.

INTRODUCTION.

IN describing the modern Architecture of Germany, it will be convenient to insist more strongly than has been necessary in the preceding pages on the distinction which exists between the *Renaissance* and the *Revival* styles of Art, which was pointed out in the last chapter.

By the former is meant that style which was practised in Europe during the sixteenth, seventeenth, and eighteenth centuries, and may be described as an attempt to apply the details and principles of Classic Art to modern forms, and to adapt them to modern usages and requirements. The *Revival*—which is wholly the creation of the nineteenth century—pretends to reproduce the actual buildings of the earlier styles, with such correctness of detail as to cheat the most practised connoisseur into a belief that he is looking on an actual production of the age to which it professes to belong, provided he can bring himself to believe he “didn’t see the biggin’ o’ it.”

Bearing this distinction in mind, the Renaissance Architecture of Germany may be dismissed in a very few lines, inasmuch as, during these three centuries, not a single architect was produced of whom even his compatriots are proud, or whose name is remembered in other countries; and not a single building erected the architecture of which is worthy of much study, nor one that calls forth the admiration of even the most patriotic Germans themselves.

The excuse for this state of things, so far as concerns Church Architecture, is, that the struggles of the Reformation, and the devastations of the Thirty Years’ War, threw Germany back for a century at least, and left her with a divided establishment and a superfluity of churches—inherited from the ages of united faith and ecclesiastical supremacy; while, on the other hand, the number of small kingdoms and principalities into which the country was divided, each with its own small capital, prevented them from indulging in that magnificence in Secular Art which the unity of the greater monarchies enabled them to display.

The real cause probably lies deeper, and will be found in the fact that, however great or good the Germans may be in other respects, they have no real feeling for the refinements of Art, and no taste for architectural display. In fact, since the great age of the Hohenstaufen, Germany has done nothing great or original in this direction. As was pointed out in a previous chapter,¹ she borrowed her Pointed

¹ ‘Handbook of Architecture,’ Book V. Chap. I.

Gothic style from the French, and very soon marred it entirely by fancying that mechanical dexterity and exaggerated tours de force were the highest aim and objects of an art whose best qualities are expressed by solidity and repose. In their painting, too, technical skill and patient elaboration of detail were qualities more esteemed than the expression of emotion or the presentation of a poetical idea. There was a good deal to admire and much to wonder at in the Art of the Germans of the age immediately preceding the Reformation, but little that either appealed to the feelings, or awakened any of the deeper or more lasting emotions of the human heart.

When, after the troubles of the sixteenth century, the Germans settled down to the more quiet and prosperous years of the seventeenth and eighteenth, the Teutonic mind seems almost to have forgotten that such a thing as a fine art existed—at least, as a living form of utterance that could be practised in those days.

It is true that the wealth of the Saxon kings induced them to spend enormous sums on works of art, but their patronage took the form of purchasing the pictures of foreign artists, and manufacturing expensive toys at home, while they lived in a palace so mean in appearance, that it requires strong faith in the veracity of your valet de place to believe that such is really a royal residence. It is true also that Frederick of Prussia displayed his greatness in building French palaces as he wrote French verses; but it is difficult to say which is the least worthy of the admiration of posterity. The truest type of Teutonic Art is perhaps the Burg at Vienna—the imperial residence of the Emperors of Germany—on which each succeeding member of the House of Hapsburg has left his mark, but without one of them showing the least appreciation of the value of architectural display, or the smallest desire to depart from the most homely form of utilitarian convenience.

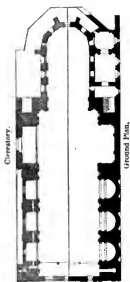
Notwithstanding this Teutonic apathy to Art, there are a few buildings which cannot be passed over, being interesting, if not for their beauty, at least for their originality, and the constructive lessons they convey.

CHAPTER I.

RENAISSANCE.

ECCLESIASTICAL.

ONE of the earliest and most remarkable churches of this epoch is that of St. Michael at Munich, built from the designs of an architect called Müller, between the years 1583 and 1597. The nave is one grand spacious hall, 180 ft. long by 67 in width, covered by a simple waggon vault of brickwork without any pillars or apparent abutment inside; the choir is narrower, but in most pleasing proportion to the nave; and the lighting, which is kept high, is just sufficient without being obtrusive. It would perhaps have been better if the transept had been omitted or differently managed; but the real defect of the church consists in the execrable details with which this noble design is carried out. These are so offensively bad that few trouble themselves to realize the grandeur of the design which they disfigure, and externally they are so much worse that few travellers care to enter a



210. Plan of St. Michael's Church, Munich. From a Drawing by F. Penrose, Esq. Scale 100 feet to 1 inch.

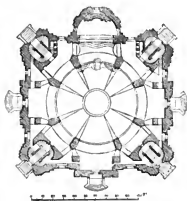


211. Section of St. Michael's Church, Munich. From a Drawing by F. Penrose, Esq. Scale 50 feet to 1 inch.

church which promises so little that could be worthy of admiration ; but if these can be forgotten or overlooked, its dimensions are such as few, if any, churches can equal, either as regards spaciousness or harmony of proportions ; nor has any church of its age a vault of such daring boldness of construction.

The real interest of this design consists in its illustrating, as clearly as any that can be quoted, what the early Renaissance architects were really aiming at in the changes they were introducing. They felt—whether rightly or wrongly may be questioned—that the pillars with which the Gothic architects crowded their naves not only occupied a great deal of useful space, but interrupted the view of the ceremonial at the altar, and interfered with the grandeur of the processions. The great vault of the Roman *Thermæ* showed them how much larger spaces could be roofed without supports, and, captivated with their discovery, they sought instantly to adopt it, but in doing so rushed to the other extreme. It was accidental that at the same time the rage for Classical details should also have sprung up, but that was not the primary feeling which captivated the early architects. The real motive was the vastness of Roman designs ; and, whether at St. Peter's, at Mantua, or in this instance, they sought to emulate the greatness more than the forms of the Classical structures. It was really not till the time of Palladio and his school that they sought also to reproduce the plans and details—at least as the principal object of a design. Had they adhered to the former system, we might perhaps have hardly regretted the change. It was the second inspiration that really ruined the art, and produced all the incongruities which we afterwards lament.

More original than this, and perhaps the most satisfactory church in Germany of this age, is the *Liebfrauen Kirche* at Dresden. It is a square church, 140 ft. each way, exclusive of the apse, covered by a dome 75 ft. in diameter, resting on eight piers ; but its great peculiarity being the perfect truthfulness with which it is constructed throughout. Internally and externally it is wholly of stone ; not only the dome, but the whole of the roof is shown, and all is constructively true—a merit possessed by no other Mediæval or modern church. The shape, too, of the dome is sufficiently graceful externally ; and, with its four subordinate turrets, forms the most pleasing object in every view of the city. Internally, it is too high in proportion to its other dimensions, and, having no nave or transepts, it is rather well-like in appearance, while the effect has been further marred by the theatrical manner in which it has been fitted up. There is a regular pit, two



212. Plan of the Liebfrauen Kirche, Dresden.



213.

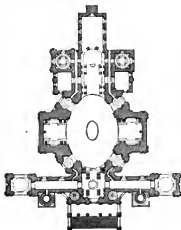
View of the Liebfrauen Kirche, Dresden. From a Photograph.

tiers of boxes, and a gallery—all of the flimsiest construction, and in the worst possible taste. Externally, too, there is a coarseness and vulgarity in its details which detracts very considerably from the effect; but, notwithstanding these defects, it is the most pleasing and suggestive of German churches, and, with slight modifications, it might be made very beautiful; but it would be expecting too much to look for any great beauty of design in the age in which it was erected (1726-1745), or from an unknown individual like Behr, who has the credit of being its architect.

Like the Jesuits' church at Munich, it was an effort to do something that neither the Roman nor Gothic architects had achieved, and was only unsuccessful from its being a first attempt. Those who are aware how many hundreds—it may be said thousands—of repetitions were necessary before a really satisfactory Gothic church was built, should not feel surprised that this first essay to realize a novel form should not be quite successful; but if a second, or third, or fourth had been demanded, the last, or at least the twentieth, might have been all that could be desired. But it never was repeated. The next church

was by a different architect, in a different style. The principle died with its author, as is the case with most modern designs; and all, consequently, fail in producing the effect that might easily have been attained by a more persistent system.

The only Renaissance church of any architectural pretensions that Vienna can boast of is that of San Carlo Borromeo, built by Charles VI., in 1716, from designs by Johann Fischer,¹ the most celebrated architect of his day. The nave is covered by a dome, elliptical in plan (75 by 110 ft.?), and, consequently, of most disagreeable and ever varying outline externally, with two short transepts and a very long narrow choir. The façade is disproportionately wide, terminating in two towers, and with a portico of Corinthian pillars, on each side of which are two tall Doric columns, covered with bas-reliefs winding spirally round them, like those of Trajan's Column at Rome. These represent scenes in the life of Carlo Borromeo, with all the incongruity of modern costume adapted to Classical design. Altogether, it is a strange conglomeration of parts, and, being principally in badly-moulded stucco, the effect is neither tasteful nor imposing.



214. Plan of the Church of San Carlo Borromeo.
Scale doubtful.

Even this church is better, however, than the Hof Kirche at Dresden, commenced in the year 1737, from designs by Claveri, and which, notwithstanding its dimensions and its situation—which is unrivalled—is as unsatisfactory a church as can well be imagined. Bad as this is, even it is better than the starved, poverty-stricken, stucco erection, dignified by the name of cathedral, at Berlin, which was built in the year 1750, by an architect of the name of Bowman.

In the last-named city there are two great churches in the Gens-d'armes Platz, of the most commonplace architecture; so mean, that Frederick the Great determined to beautify them; but instead of rebuilding or redecorating them, he left the churches in their original ugliness, and added a great mass of masonry in front of each. This consists of a square block, with a handsome Corinthian portico,—in stucco of course,—on three of its faces, with two stories of windows under the porticoes; over this is an attic, and in the centre of each a tall dome, surrounded by a peristyle of columns. The outline of these domes is as graceful as any that have been erected of their class; and owing to there being no constructive difficulties, they grow pleasingly out of the masses below; so that altogether, if they were real domes,

¹ Born 1650; died 1724.

they would be deserving of considerable praise ; but being mere shams, and executed in plaster, they lose much of the dignity to which they might otherwise attain. The design, too, of the blocks on which they stand is by no means ungraceful, and if their area had been added to the churches might have been excused ; but, whatever their original destination, they are now mean and dilapidated residences, and mere screens so far as the churches are concerned.



215. Church and Theatre in the Gens-Farmer Platz, Berlin. From a Photograph.

A better class of churches are such as the Dom at Salzburg, built by Solario in 1614, the cathedral at Munich, the church at Mülk, and many more. These and others are built on the Italian plan—small copies of St. Peter's—with a dome in the centre, on the intersection of the nave and transept, and generally two western towers. They are neither so elegant in design as their Italian prototypes, nor, from their being generally in stucco, have they the same redeeming quality of richness of material. But they are Catholic churches of a well-understood type and ordinance, and, if they do not call forth much admiration, they do not offend by incongruity, or vain attempts to show off the ingenuity of the architect who designed them. None of them, however, present any distinguishing features not to be found on the other side of the Alps, and they hardly therefore deserve a place in a chapter devoted to German Architecture.

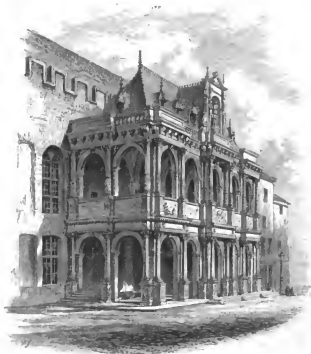
SECULAR.

The Germans were not more successful in their attempts at Secular Architecture during the period of the Renaissance, than in their

Ecclesiastical buildings. The architect wanders in vain through the capitals of Germany in hopes of finding something either so original or so grand that it should dwell upon the memory, even if it does not satisfy the rules of taste.

The best known and the most picturesque example is certainly the Castle at Heidelberg, though it perhaps owes more to its situation, to its associations, and to its present state of ruin for its interest, than to its merits as an architectural production. The first architectural part was engrafted in 1556 on the older feudal buildings, and is a pleasing specimen of the style we should call Elizabethan in England; but the most admired is the Fredericks Bau, built in 1607. It is a rich but overloaded specimen of the style which prevailed in France in the reign of Henri IV. Situated in a courtyard as this is, we can forgive a considerable amount of over-ornamentation, but, even then, the effect produced is by no means equal to the amount of labour bestowed upon it; and with every allowance for divergence of taste, there is an amount and style of carving here which might be appropriate in cabinet work, but certainly is inappropriate and offensive in anything more monumental.

At Cologne there is a pleasing porch added to the old Rathhaus in



1571, and though so late in date the arches are slightly pointed, notwithstanding their being placed between Classical pillars, and the roof is groined after a tolerably pure Gothic type. Though small, there is more thought bestowed on its design than may be found in many buildings of very much larger dimensions; and this, combined with a considerable degree of elegance, has resulted in producing the most pleasing piece of Architecture that Germany can boast of during these three centuries. It is true the Order here employed is a mere ornament, but it does not pretend to be anything else. The real constructive work is seen to be done by the arches behind it; and great pains are taken to make it appear that the pillars and their accompaniments are added not only to give richness to the design, but also to call back the memories of Classical Art most appropriate in the Capitol of the great Colonia of the Romans.



217.

Part of the Zwirner Palace, Dresden. From a Drawing by Proust.

The most original, and perhaps also the most picturesque building in Germany of this age, is the Zwirner Palace at Dresden, commenced in 1711 by Augustus II. Unfortunately it is only a fragment—the forecourt to a palace which would have been of wonderful splendour had it ever been completed, though the taste in which it was designed

may have been more provocative of laughter than of feelings of respect. In a courtyard certain vagaries are admissible; but in no age, and in no place in Europe,¹ has so grotesque a style been carried into execution as here. It is an exaggeration of the Rococo style of Louis XV., such as in France was only applied to internal decoration, and employed in this palace more extravagantly than ever dreamt of by any French architect. It could only have been applied to external architecture by the kings who wasted their treasures on the toys of the Grüne Gewölbe.

In singular contrast to this, the same Elector built the Japanese Palace as a country residence,—in the German sense of the term,—within a gunshot of the Zwirner. It is a square block of buildings, divided on each face into five compartments, each three windows in width. The basement is rusticated; the two upper stories adorned with, and included in, one range of pilasters. The roof is pleasingly broken into masses, and being covered with copper, which is now of a bright green colour, the effect of the whole is peculiar but pleasing—perhaps as much so as any palace



214. Japanese Palace, Dresden. From a Photograph.

in Germany; though this arises not from any remarkable beauty or originality it may possess, but simply because it is a design, and because there are no offensive extravagancies about it, or any attempt to make it appear other than it is.

The Schloss at Berlin ought to be an interesting building, inasmuch as it contains specimens of the work of each succeeding elector or king since Prussia first emerged from obscurity to the present day; and its dimensions are such that it must have a certain dignity in spite of any faults of design. It measures 565 ft. east and west, by 385 ft. north and south; the exterior being nearly uniform in style,—having been principally erected between the years 1699 and 1720,—and is four bold stories in height. Internally the mass is divided into two courts by a block of the earlier palace, which apparently it was intended to remove, though, were it rebuilt, its being retained would give more effect to the interior.

It may also be added that there is no very striking instance of bad taste in the whole design; still with all this it is far from being satis-

¹ The thing most like it is perhaps the Kaiser Bagh at Lucknow.

factory. The material is brick and stucco—the latter not always kept in repair. The window-dressings are coarse and vulgar. Pillars, where used, are merely ornaments stuck on high basements, and altogether, but for its mass, few would pause to inquire its destination. There is not in any part, or in any of its details, evidence of that elegance or refinement which is the first and most indispensable requisite in the architecture of a king's palace; a look of coarseness, almost of vulgarity, pervades the whole, and this is heightened by the appearance of neglect and dirt which is everywhere observable.

The palace at Schönbrunn, near Vienna, is supposed by the inhabitants of that city to make up for the defects of the Burg in architectural display. It was erected in 1696, from the designs of the same Fischer who built the San Carlo, and meant to be a copy of Versailles on a small scale. It is in plaster, of course, and having recently been adorned with a new coat of white and yellow washes, and the Venetian blinds painted of the brightest green, its effect is as gay as the Government House of a West Indian colony, but by no means admirable as a specimen of Architectural Art.

The New Palace built by Frederick the Great at Potsdam is superior to Schönbrunn as an architectural object, though something in the same style, and more to be admired for its dimensions than the art displayed in its design or adornment.

Germany is singularly deficient, as might be expected, during the Renaissance period, in monumental trophies, such as triumphal arches, columns, &c.; the only really important example being the Brandenburg Thor, at the end of the Linden, at Berlin. This very narrowly escaped being a really fine building, and, considering its age (it was erected between 1784 and 1792), it is one of the very best reproductions of Greek Art that had then been erected. It consists of two ranges of six Doric columns, joined in the direction of their depth by a screen of wall, which was necessary for the attachment of the leaves of the gates which fold back against them; and above the colonnade is a quadriga, bearing a figure of Victory.

It was not, perhaps, a very legitimate use of an Order to employ it where gates were necessary, which the columns only serve to mask, and the details of the Order are not such as to satisfy the critical eyes of the present day; but there is a largeness and a grandeur about the whole design which in a great measure redeem these faults, and, taking it all in all, except the Arc de l'Etoile at Paris, it would be difficult to find any modern triumphal gateway in Europe which could bear a fair comparison with this.

At Berlin there are several buildings, such as the Arsenal, the Public Library, the University, &c., on which tourists have been content to lavish their commendations for want of something to vary the monotony of blame that runs through all that can be said of the German Architecture of this age. But none of these are beyond the level of the merest mediocrity, and there does not appear to be a single municipal or administrative building, either at Vienna, Dresden, Munich, or any



219.

Brandenburg Gate, Berlin. From a Photograph.

of the minor capitals, which is worthy of commemoration as an architectural object.

During the three centuries of the Renaissance period, the German nobles built no city palaces to be compared in any way with those which adorn every town in Italy, nor one single country residence that can match in grandeur the country seats that are found in every county in England. From the great high roads a barrack-like residence is occasionally discovered at the end of an avenue of stunted trees; but it would be as great a mockery to call it an object of Architecture, as to dignify its entourage by calling it a park.

Nothing, in fact, can well be more unsatisfactory and less interesting than the history of German Architecture during the Renaissance period. It was not that they were afflicted by a hankering after Classicality, or any other form of Art; or were seized with that mania for porticoes, by which so many of our public and private buildings have been disfigured. It was simply indifference. After the last echoes of the Middle Ages had ceased to vibrate, men forgot the fine arts, and were content with any form of building which suited best the utilitarian purposes to which it was to be applied—and there the matter rested. They have now awakened from this trance, and are energetically bent on achieving success in architectural design. The inquiry how far the result has answered to the endeavour forms the subject of the succeeding chapter.

CHAPTER II.

REVIVAL.

ALTHOUGH it is scarcely probable that Germany could long have remained uninfluenced by the demand for a higher class of Art which spread throughout Europe after the termination of the great war which arose out of the catastrophe of the French Revolution, still great credit is due to King Louis of Bavaria as being the first to give practical effect to the call, and it was his example that stimulated the other States to exertion in the good cause.

When a young man, residing at Rome, and as Crown Prince of Bavaria, Louis seems to have been struck with admiration for the great works he saw there, and from their contemplation to have imbibed a love of Art, which led him to resolve that when he came to the throne he would devote his energies to the restoration of German Art, and make his capital the central point of the great movement he was contemplating. Earnestly and perseveringly he worked towards this end during the whole of his reign; and if the result has not been so satisfactory as might be wished, it has not been owing either to want of means or of encouragement on the part of the king, but to the system on which he proceeded, either from inclination, or from the character of the agents he was forced to employ in carrying out his designs.

The ruling idea of the Munich school of Architecture seems to have been to reproduce as nearly as possible in fac-simile every building that was great or admirable in any clime, or at any previous period of history, wholly irrespective either of its use or of the locality it was destined to occupy in the new capital. Whatever the king had admired abroad his architects were ordered to reproduce at home. The consequence is that Munich is little more than an ill-arranged museum of dried specimens of foreign styles, frequently on a smaller scale, and generally in plaster, but reproducing with more or less fidelity buildings of all ages and styles, though in nine cases out of ten designed for other purposes, and carried out in different materials.

Had the king, on the other hand, insisted that his architects should copy nothing, but must produce buildings original in design and adapted to the climate of Germany and the usages of the nineteenth century, he had it in his power to be the founder of a school of Art which would have rendered his name illustrious in all future ages. Probably such a conception was as much beyond the calibre of the royal patron's mind as it might have exceeded the talent of his

artists to execute it. Unfortunately the reproduction of the Parthenon or the Pitti Palace enabled flatterers to suggest that he had equalled Pericles or the Medici, and it was not thought necessary to hint that the printer who multiplies the work of a great poet need not necessarily be as great as the author of the first conception. To the architects it was Elysium ;—they had only to measure and repeat : authority sanctioned all blunders and relieved the artist from all responsibility.

The experiment was so novel, at least in Germany, that it was at first hailed with enthusiasm ; but after this has subsided, the mind recoils from the total want of thought displayed in the buildings at Munich, and common-sense is revolted at their want of adaptation to the circumstances in which they are placed. The result may eventually prove fortunate for the development of the art of Architecture. The king has placed before his countrymen specimens of all schools and all styles ; and the contemplation of these may arouse the German mind to emulate their beauties instead of servilely copying their details. But meanwhile the mind of the student is puzzled by the variety of examples submitted for his admiration. Is it the Walhalla or the Aue Kirche he is to admire ?—the Königs Bau or the Wittelbacher Palace ? To which end of the Ludwig Strasse is he to look for his model of an arch ? It may prove to be a useful school ; but it is now only a chaos, and no master's hand exists to guide the student's mind through the tortuous mazes of the unintellectual labyrinth in which he finds himself involved. It is difficult to imagine in what direction the tide may ultimately turn. If the German mind is capable of originality in Art, it ought to be for good. They have copied everything, and exhausted themselves with imitations *ad nauseam*. It remains to be seen whether they can now create anything worthy of admiration.

ECCLIASTICAL.—MUNICH.

One of the earlier churches undertaken by the late king was that of St. Ludwig, in the street of the same name. It was designed by Gärtner, in the so-called Byzantine style. Externally the building is flat, and has little to recommend it, except some very tastefully executed ornaments in stucco. The two towers that flank it are placed so far apart as scarcely to group with the rest of the design, and are in themselves as lean and as ungraceful conceptions as any that have been perpetrated during this century. Internally, the frescoes which cover its walls redeem its architectural defects, and are in fact the only excuse for the employment of a style so little tractable as this is. If a law were in existence, either artistic or statutory, that frescoes shall only be used in conjunction with this style, no one of course would object to its employment. But it is difficult to discover any reason why a building in any other style should not be so designed as to admit of painted decorations being introduced, so as to cover every foot of space from the floor to the roof ridge ; and if it is so, the idea that Byzantine churches only should be so decorated can only be consi-

dered as one of those self-imposed trammels so characteristic of the modern school of Art. In fact, the art of forging fetters to be worn for display, seems the great discovery of the Revival; and, though a knowledge of the means by which this is done is necessary to understand the arts of other countries also, its trammels are nowhere so prominent and so universally adopted as in Munich.

The Ane Kirche, which was proceeding simultaneously with the Ludwig Kirche, is another prominent example of the same system. It is in the late attenuated German Gothic style, without aisles or break of any sort externally; and, as an architectural design, very little to be admired; but its pointed windows, like St. Ludwig's frescoes, are supposed to redeem its other defects. It need hardly be added that if the one is right the other must be wrong; two diametrically opposed modes of decorating and building, to be used in the same age for the same purposes, can hardly both be equally good; and in these two instances, at all events, neither can be considered successful in an architectural point of view.



220.

Exterior View of the Basilica at Munich. From a Photograph.

Far more successful than either of these is the Basilica erected under the superintendence of Ziebland; which, as a whole, is perhaps one of the most successful of modern imitative churches. Its dimensions are considerable, being 285 ft. in length, with a width of 114 ft.; with the apse, narthex, &c., covering nearly 40,000 ft. Externally the simplicity of the style has prevented any offence against taste being committed, and the portico is a simple arcaded porch, in good proportion with the rest, and suggestive of the interior. Internally the arrangement is that, on a smaller scale, of the Basilicas of

the old St. Paul's, or St. Peter's at Rome;—a nave 50 ft. wide, and two side aisles, divided from each other by sixty-four monolithic columns of grey marble, with white marble capitals, each of a different design, but all elegant, and all appropriately modelled to bear the impost of an arch. The timbering of the open roof is perhaps too light, and has a somewhat flimsy appearance.

Except the pillars and their capitals, there is scarcely an architectural moulding or ornament throughout the interior. Every part is painted, and depends on painting for its effect; and though the result is satisfactory and beautiful, it might easily have been better. The old basilica-builders had an excuse for omitting architectural details. They borrowed their pillars from older edifices, and had not art sufficient to do anything beyond building a plain rubble or brick wall over those pillars, and then trying to hide its poverty by gilding and paint. Though the canons of the Munich school of Art would not allow anything but servile copying, even of defects, there can be no doubt but that an architectural archivolt from capital to capital, bolder stringcourses, and mouldings round the windows, would not only have improved the interior immensely, but would have aided the effect of the painted decorations, and given value to the frescoes, which, for want of framing, lose considerably of the effect they might otherwise have produced. As these things, however, did not exist in the original, it is not fair to blame the architect for not introducing them in the copy. The task proposed to him was to reproduce a basilica of the fifth century, and the standard by which it must be judged is how far, in the nineteenth century, he has reproduced the arts of that period of decay and degradation. He could easily have improved on his model, but that was forbidden. Such being the case, it would be easy to point out other defects than those above noted; but on the whole there is probably no modern church more satisfactory, or which, from the simplicity of its arrangement, and the completeness and elegance of its details, produces so solemn and so pleasing an effect.

WALHALLA.

Is the Walhalla a church? If not, it would be difficult to say what it is. At all events there seems to be no other class under which it can well be ranged. Externally it has no merit but that of being an exact and literal copy of the Parthenon; but situated on a lone hill on the banks of the Danube, surrounded by the tall roofs of German villages, and village spires, without one single object to suggest how it came there, it is the most singular piece of incongruity that Architecture ever perpetrated. Minerva descending in Cheapside to separate two quarrelling cabmen could hardly be more out of place. Internally, too, the strange mixture of German sagas with Grecian myths, and the clothing of German traditions and German savages with the exquisite poetry and grace of Grecian Art, produces an effect so utterly false as to be painful.

The architect, no doubt, saved himself an enormous amount of trouble and of thought when he determined on reproducing literally a copy of the Parthenon, and he also escaped an immense amount of responsibility by adopting so celebrated a design in all its integrity. It would have taken him years of patient study to produce anything original at all approaching it in merit; and we know that neither Klenze nor any modern architect could possibly design anything so perfect. Notwithstanding all this, there is nothing in all the principles of the art so certain as that any carefully elaborated design would have been better than this, if appropriate to the situation and the climate, and if it expressed truthfully and clearly the objects for which the building was erected, as well as the feelings of the age in which it was executed.¹ Though Klenze only did what most of his brother architects are doing, it was treason against the noble art he professes; and his opportunities have been such that he is more to blame than most of his brethren for the present state of the art in this respect.

Fortunately the architectural arrangement of the interior has some novelty, combined with considerable appreciation of the elements of



221. Plan of Walhall.
Scale 100 feet to 1 inch.

Grecian Art, and, putting aside all question as to its appropriateness and all reference to the meaning of its decorations, it reproduces not unworthily the effect of such a hall as might have existed in Greece in the days of her prime. Had Klenze been content to reproduce the interior of the Parthenon with the same servility as he did the exterior, he would have lost a great opportunity of showing how easily the details of Greek Architecture lend themselves to modern purposes, when applied with a sufficient amount of care and thought. The hall, which is 50 ft. wide by 150 in length, is divided into three nearly square compartments by projecting piers. The light is pleasingly introduced in sufficient quantities through the roof, the sculpture well disposed, and altogether it may be considered as one of the most elegant as well as one of the richest halls which have been produced in this century. Its

great and only worthy rival is St. George's Hall, Liverpool,—the two forming curious illustrations of the adaptability of Grecian or Roman Architecture to our modern purposes.

The Ruhmes-halle is a better attempt at applying the detail of pure Greek Architecture to modern monumental purposes. Here the statue is meant to be everything; and the architecture not only allows it to be so, but aids the effect by tying, as it were, the statue to the hill-side, and suggesting a reason for its being there, while the

¹ We willingly pay 500*l.* for an original work by Holman Hunt, while we can buy an excellent copy of the *Spesialia* of Raphael

for 50*l.*; yet the picture is quite as appropriate to London as to Milan.



222.

Ruhmes-halle, near Munich. From a Photograph.

building is kept so low and subordinate as rather to aid the colossal effect of the statue than to interfere with it. So far, therefore, as the Grecian principle of design was thought indispensable for the sculpture, the application of the Grecian Doric Order was not only legitimate but appropriate, and has been effected with more skill and originality in this instance than is to be found in any other adaptation of it in Munich.

SECULAR.—MUNICH.

The Glyptothek is one of the earliest as it is one of the best of Klenze's Munich designs. As in the Ruhmes-halle, there is a certain amount of appropriateness in a Classical windowless building being erected to contain ancient sculptures, or modern examples executed on



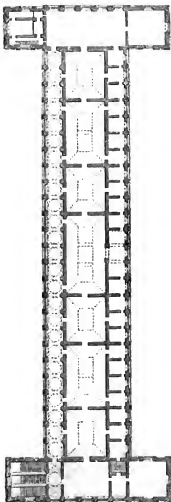
223.

Glyptothek, Munich. From a Photograph.

the same principles; and both externally and internally this gallery is singularly well arranged for the purpose to which it was to be applied. Having been erected before any buildings existed in its neighbourhood, the architect does not seem to have foreseen that it would appear low when brought into competition with taller edifices; and this defect is further increased by the size of the portico; which, though elegant and well-designed in itself, is too large for the structure to which it is attached. The Exhibition building, which forms the pendant to the Glyptothek on the opposite side of the square, avoids these defects by being placed on a lofty stylobate, and its portico approached by a handsome flight of steps. It thus gains considerably in dignity, though it is at the expense of its older and less pretentious neighbour.

Internally the Glyptothek is better arranged and better lighted than any other sculpture-gallery in Europe;¹ and although the ornaments on the roof may be open to the reproach of heaviness, they were the fruit of the first attempt to employ Grecian details in this manner, and they are always elegant and appropriate; and with a better treatment as to colour and gilding, these defects might be made much less prominent.

The Pinacothek, which was erected about the same time by the same architect, is in some respects superior to the Glyptothek. Both externally and internally the design is that of a picture-gallery, and so clearly expressed that it is impossible to mistake it for anything else. The materials too—brick with stone dressings—are left to tell their own tale, and add to the air of truthfulness which pervades the



224. Plan of Pinacothek, Munich.
Scale 100 feet to 1 inch.

whole building. The worst feature of the design is the glazed arcade extending the whole length of the front on the principal storey. It is

¹ The mode in which the Eginetan marbles are lighted and seen here, goes far to obviate even an Englishman's regret that they did not

fall to the lot of a nation which cannot erect a more suitable building for this purpose than the British Museum.

quite true that there are similar arcades in the Vatican, which it has been found necessary subsequently to glaze in order to protect their frescoes from the atmospheric influences; but it is a singular instance of the Chinese habit of mind of Munich architects that they should build a glazed arcade in imitation of those at Rome which have been so perverted from their original purpose. One-fourth or one-sixth of the window-space would have been more than sufficient for this corridor, and architecturally the back of the building is far more satisfactory than the front, though there are two stories of commonplace windows under the Order that represents this pretentious arcade in the front. They, however, are useful, and consequently easily excused; whereas the corridor is so hot in summer, and so cold in winter, that it cannot be used as an approach to the galleries; and at all seasons so exposed to atmospheric changes that it is impossible to preserve the frescoes with which its walls are adorned. In other respects the

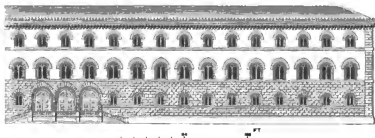


225. Half Section, half Elevation of Pinacothek, Munich. Scale 50 feet to 1 inch.

arrangement of the gallery is the most perfect yet devised for its purposes. Nothing can be finer than the range of great galleries down the centre for large pictures, of smaller cabinets on one side, and (if properly designed) of a corridor of approach on the other. It would nevertheless have been better if the entrance had been in the centre of the principal front, and the staircase projected out behind; but the object evidently was to use the corridor, though that advantage has been lost in consequence of the way in which the design was carried out.

Behind this gallery a new one has recently been erected, which certainly is original, inasmuch as it is unlike any building that ever was erected before, and, it is to be hoped, ever will be erected hereafter; but it loses the advantage of even this merit by pretending to be in the Byzantine style, though adorned externally with frescoes, the subjects and design of which most unmistakably belong to the present hour. But, in addition to these defects, the building is unpleasing in form, and so deficient in light and shade as to be positively disagreeable.

The Royal Palace at Munich is by no means so successful an attempt as these last-named buildings. The façade towards the Theater Platz is only a bad copy, on a reduced scale, of the Palazzo Pitti at Florence; and as if it were not degradation enough to see its bold rustication repeated in bad stucco, the effect is further deteriorated by an increase in the relative size and frequency of the apertures, and the introduction of a very lean range of pilasters in the upper stories, and a consequent diminution of the projections as a compromise between the rustications and the Order. The garden front has less pretension, and is consequently less open to criticism; but at best it is scarcely superior to a stuccoed terrace in the Regent's Park, and executed in the same material, the only striking difference being that the loggia in the centre is painted in fresco internally, but, as there is no colour elsewhere, it has more the effect of a spot than a part of one great design.



226.

Part of the Façade of the Public Library, Munich.

Till very recently the Ludwig Strasse was the pride of Munich. Gärtner's great buildings, the Library, the University, the Blind School, Klenze's War Office, and the Palace of the Prince of Lichtenstein, were thought to be the *ne plus ultra* of Architecture. It is now admitted that, notwithstanding a certain elegance of detail, there is a painful monotony in the endless repetition of similar small openings in Gärtner's buildings, and a flatness of surface not redeemed by a machicolated cornice, for it is so small as to be absurd if intended to represent a defensive expedient, and not sufficient to afford shadow to such monotonous façades. Nor is the dull monotony of the street much relieved by the introduction of a Roman triumphal archway at one end, far too small to close such a vista, or a shadowless repetition of the Loggia dei Lanzi at the other.

The good people of Munich themselves seem aware of the mistake that has been made in the design of the Ludwig Strasse, inasmuch as they have commenced a new street, on nearly the same scale, at right angles to this, and extending from the Palace to the river. Instead, however, of the grand simplicity of its rival, the Maximilian Strasse is of the gayest type of modern Gothic, if the term Gothic can be applied to a style that is like nothing that ever existed in the Middle Ages; but it is assumed to acquire this rank from having pointed

openings, wooden mullions, and contorted mouldings, with an occasional trefoil or quatrefoil of the Wittelbacher Palace pattern. What the effect will be when finished, it is not easy to guess. As far as can be now judged, it is the flimsiest and most unsatisfactory attempt that has yet been made to reproduce the style of a bygone age. The Railway Station, on the other hand, may be considered as a successful attempt to adapt the brick architecture of mediæval Italy to modern uses. The general design is very pleasing, and the details elegant; and if it were not that the style is assumed to prohibit cornices and copings, the whole might be pronounced a success; but it wants eyebrows, and there is a weakness arising from want of shadow which reduces it to a very low grade in the scale of architectural effects.

On the whole, the survey of the Revival of Architecture, as seen at Munich, from the accession of Ludwig I. to the present day, is by no means encouraging. Immense sums have been lavished, with the very best and highest motives—men of undoubted talent have been employed, not only as architects, but as sculptors and painters, to assist in completing what the architect designed; but with all this, not one perfectly satisfactory building has been produced, and the general result may be considered as an acknowledged failure, inasmuch as the principles on which the school of Ludwig was based are already ignored by that of Maximilian. It is not clear whether it is the fault of the artists or their employers, but both are hampered and weighed down by the false idea that mere memory can ever supply the place of thought in the creation or production of works of Art.

BERLIN.

Although the city of Berlin has not been remodelled to anything like the same extent as Munich, and the architectural movement there has not been heralded to the world with the same amount of self-laudation which the inhabitants of the southern capital have indulged in, still the northern people seem on the whole to have been fully as successful, if not more so, in the architects that have been employed on their great buildings. The revival also seems to be more real, and to have descended deeper, inasmuch as many of the modern houses in Berlin are models of elegance and good taste, while the private architecture of Munich is commonplace to a degree astonishing in a city of such pretensions.

The Prussians, however, are not a church-building race; and they are very far from being successful in the few attempts they have made. One of the most prominent examples in Berlin is the Werder Kirche near the Palace, a brick building in the so-called Gothic style, but both internally and externally as little to be admired as any structure of its class and age. It must, however, be mentioned that Schinkel, who designed it, was essentially a Classical architect, and understood or admired the Gothic style about as much as our Sir Christopher Wren. His own original design for this church was Classic, and a far more beautiful and appropriate composition than the one which the then



227.

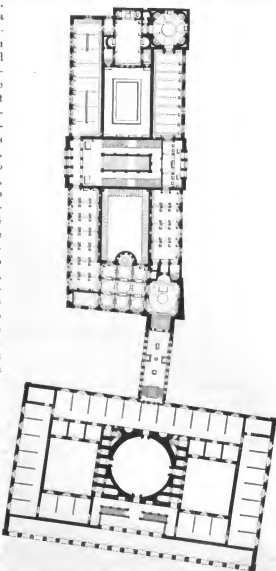
Nicolai Kirche, Potsdam. From a Photograph.

nascent sentimentalism of the Romantic school forced upon him. This is the more to be regretted for his sake, as his greatest executed design in his favorite style is the Nicolai Church at Potsdam, and, whether from his fault, or that of those who employed him, cannot be considered successful as an architectural composition.

Externally the church consists of a nearly cubical block 120 ft. square in plan, by 87 in height, with a Corinthian portico attached to one side, far too small for its position, and with a great dome placed on the top, as much too large for the other proportions of the church. Internally the proportions are even worse, for it is practically a room 105 ft. square, and 162 in height!—a blunder which all the elegances of detail, which Schinkel knew so well how to employ, can neither render tolerable nor even palliate in any degree. The truth seems to be that the Germans have had very little experience in church-building of late years, and have no settled canons to guide them, while it requires a man of no small genius or experience to foresee what the exact effect of his building will be when executed, though on the drawing-board it may seem to fulfil all the conditions of the problem.¹

¹ If the good people in Berlin carry out the rebuilding of their cathedral according to the design which is understood to have been accepted for that purpose, the result will be

Although Berlin cannot boast of any church so beautiful as Ziebland's basilica, or so complete a forgery as the Wal-halla, her Muséum is a more perfect and more splendid building than any of the cognate examples at Munich. The portico consists of eighteen Ionic columns between two antæ, extending in width to 275 ft., and in height, from the ground to the top of the cornice, it measures 64 ft. It has also the very unusual advantage of having no windows in its shade, but an open recessed staircase in the centre, sufficient to give meaning to the whole; and, now that the internal wall is painted with frescoes — though these in themselves are by no means commendable — it has more meaning and fewer solecisms than any other portico of the same extent which has been erected in modern Europe. The great defect is, perhaps, that it is not high enough for its situation. The space before it is large, and some of the buildings



228. Plan of the Museums at Berlin. Scale 100 ft. to 1 inch.

around it are high, while the square block which conceals the dome in the centre is not sufficiently important to give the requisite height and

something very dreadful indeed. It has all the faults of proportion of this church, but designed with a strangeness and inelegance of detail which is very remarkable.

dignity to the building. It is also another proof of the extreme difficulty of adapting purely Classical Architecture to modern purposes, that most of the beauty and all the fitness of this beautiful portico disappear except when seen directly in front. The moment you view it in connection with the flanks, you perceive that it is only a mask to a very commonplace building, with three stories of rather mean windows inserted in a stuccoed wall!

It is difficult to understand why Schinkel did not light his upper storey, containing the picture galleries, from the roof. All modern experience goes to prove that the pictures would have gained by this arrangement, and by it the exterior of the building would certainly have been brought much more in harmony with its portico.



229.

View of the New Museum, Berlin. From Schinkel's own design.

Internally the square form of the building admitted of very little opportunity for architectural display; and the mode in which the picture gallery is crowded with screens takes it wholly out of the category of architectural designs, but the whole is in good taste, and the central hall with its dome is a very noble and well proportioned apartment, in perfect harmony with the portico, though, like it, overpowering the more utilitarian part of the building.

Immediately in rear of this Museum another has been recently erected by Stüler, which, though making little or no pretensions to architectural display outside, is a far more satisfactory design as a whole than its more ambitious predecessor. In no part is there any attempt to make it appear anything but what it really is—a three-storied building, containing galleries for the accommodation of works of art; but the whole is carried out with so much judgment, and the details are so elegant, that, with infinitely more convenience and probably less than half the relative cost, it is as pleasing to look upon as Schinkel's great creation. Its principal merit, however, consists in its internal arrangement. The great staircase—when its frescoes and decorations are completed, will probably be unmatched by any similar apartment in any building or palace in Europe, either for dimensions or design. It leads to a series of apartments on each

of the three floors, designed with reference to the collection it was destined to contain, and the frescoes which adorn each room are equally in accordance with its object. In fact, no modern palace, much less any modern museum, displays the same amount of thought, or the same happy harmony of artistic design with utilitarian purpose, as this building does. Without the introduction of a single detail that is not pleasing to contemplate, or which does not add to the beauty of the whole, every part is decorated to the utmost extent consistent with the purposes of the Museum, and every ornament is appropriate to the place where it is found.

Next to the new Museum, Schinkel's best design in Berlin is the Theatre in the Gens-d'armes Place (Woodcut No. 215), which will be noticed further in the chapter on Theatres.

Schinkel can hardly be said to have been equally successful in the façade he added to the old contorted design of the public library under the Linden. It is simple and well proportioned, and its details elegant and appropriate; but the effect is monotonous and cold, and the little attic windows under the cornice lead one to suspect a sham which does not exist; but its worst defect is, that its extreme severity is neither in accordance with its purposes, nor in harmony with the older building to which, in spite of the repudiation of its style, it is unfortunately attached.

The Guard-house on the opposite side of the street has been much and deservedly admired. It is an elegant, and, as far as the Classical style would admit, an appropriate building for its purpose—much more so than that erected by the same architect for the same purpose at Dresden. There is a massive simplicity about the Berlin example which speaks of resistance and security; at Dresden, the building, though pleasing both in proportions and detail, might be a casino, a villa, or anything. It bears no mark of its destination on its face.

In all these, as in almost all his works, Schinkel adhered literally to the Revived Classical or Gothic styles as he understood them; the only important occasion on which he departed from those principles and attempted originality being in the design for the Bauschule, or Building Academy, situated near the Palace at Berlin. The design of this edifice is extremely simple. It is exactly square in plan, measuring 150 ft. each way, and is 70 ft. in height throughout. The lower storey is devoted to shops; the two next to the purposes of the institution; and above this is an attic in the roof, which latter is not, however, seen externally, as it slopes backwards to a courtyard in the centre. The ornamentation depends wholly on the construction, consisting only of piers between the windows, string-cornices marking the floors, a slight cornice, and the dressings of the windows and doors. All of these are elegant, and so far nothing can be more truthful or appropriate, the whole being of brick, which is visible everywhere. Notwithstanding all this, the Bauschule cannot be considered as entirely successful, in consequence of its architect not taking sufficiently into consideration the nature of the material he was about to employ in deciding on its general characteristics. Its simple outline

would have been admirably suited to a Florentine or Roman palace built of large blocks of stone, or to a granite edifice anywhere; but it was a mistake to adopt so severe an outline in an edifice to be constructed of such small materials as bricks. Had Schinkel brought forward the angles of his building and made them more solid in appearance, he would have improved it to a great extent. This would have been easy, as much less window space is required at the angles, where the rooms can be lighted from both sides, while the accentuation



230. Part of the Façade of the Building School at Berlin. From Schinkel.

of what is now the weakest place would have given the building that monumental character which elsewhere is obtained from massiveness of material. This would also have given vertically that light and shade which it is almost impossible to obtain from horizontal projections unless stone or wood is employed. Though very nearly successful, this design fails in being quite so, because, though its details are perfectly appropriate to the materials in which it is erected, its outline and general character are at variance with these, and belong to another class; had both been in accordance, it would have been Schinkel's

best performance, and one of the most satisfactory structures in Berlin. Even as it is, it marks an epoch in the art, when a man in Schinkel's position dared to erect anything so original and so free from Classical or Gothic feeling as this design certainly is.

Though these buildings are not, it must be confessed, faultless, they have all a certain quality of grandeur and purpose about them which renders them pleasing and worthy of attention; but whether it arises from individual caprice or a decadence of taste, some of the more recent erections of Berlin are far from being so satisfactory. The private residence of the late King, under the Linden, now occupied by the Crown Prince and our Princess Royal, is, though of great pretence, still a very poor design. A low basement, meant only for offices, supports a portico of four Corinthian columns, covering two stories of windows, and these are repeated as pilasters all round the building. Over this is a very tall attic, overloaded with ornament, which is far from being in good taste. The whole looks more like an English country-house of the early Georgian era than anything that ought to be erected in Berlin at the present day.

The new Exchange, too, is very much of the same character. A commonplace basement, rusticated on one side, and with a range of diminutive Doric columns on the other, supports a considerable number of Corinthian pillars on two faces, some detached, some stuck to the walls, some flattened into pilasters. There are two stories of windows under these pillars, and an attic above. The whole will be one of the most expensive and elaborately ornamented buildings in the city, but the amount of thought displayed is very small indeed, and its design very commonplace and questionable.

If the Berlin architects, after so fair a start, are to sink to such mediocrity, it will be very sad indeed. But the state of private Architecture gives great encouragement to the idea that better things may be looked for. In no city of Europe has the elegance of Classical Art been so successfully applied to domestic edifices. In the new quarters of the city and the suburbs, especially about the Thiergarten and the Anhalt Gate, there are some specimens which it is really a pleasure to look upon. Seldom do we find pillars or pilasters running through two stories, and still more rarely do we find a cornice anywhere but at the top of a building, which, of course, is the only place where it ought to be. The stringcourses are kept subordinate, but always mark the floors; and each storey is a complete design in itself. When ornament is applied, it is to the window-dressings or constructive features, and generally elegant and in good taste, so that the result of the whole is more satisfactory than any to be found elsewhere, not even excepting Paris. All that is wanted is a little more perseverance in the same course, that certain details may be more thoroughly naturalized, and the whole style settle into that completeness which would prevent the probability of future aberration.

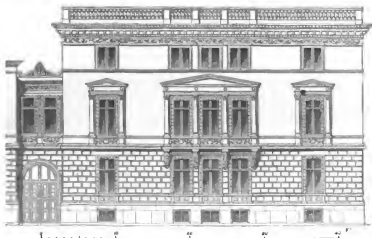
Whether this will be the case or not is rather problematical. Already we find early French Renaissance ornaments and high roofs peeping through occasionally, and fashion, it is to be feared, will, as it generally does, prove too strong for common sense to be able to resist.



231.

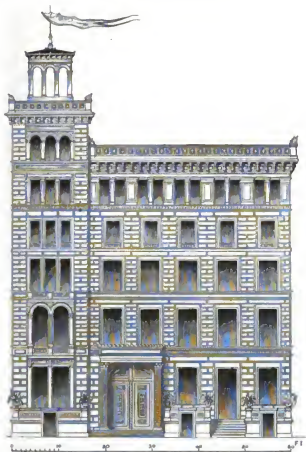
Group of Houses facing the Thiergarten, Berlin, by Hitzig.

It will be very sad indeed should this prove to be the case, for Monumental Architecture, to be satisfactory, must be in accordance with, and based upon, Domestic Art, if it is to be true and to speak to our feelings. Certainly there is no city in modern Europe where the architects have shown such aptitude in combining all that is elegant in the Classical styles with the wants and requirements of modern habits; and if they now forsake the true path, it is difficult to say where we are to look for any indications of hope or promise for the future.



232.

Palace of Count Pourtales, Berlin.



233.

House at Dantzig. From Hitzig, 'Ausgeführte Bauwerke.'

The best class of the new houses at Berlin are of the type represented in Woodcut No. 231, where the windows are left to tell their own story, with only a slight rustication at the base of the building, a cornice at the top; to these are added an occasional verandah or balcony, but which is neither a part of the construction, nor interferes in any way with the main lines of the design. With these simple elements numerous very elegant and imposing mansions have been erected of late years—some much richer than this example, some few plainer; but all exhibiting the same strict adherence to truth, and the same absence of affectation.

Occasionally, as in the house of Count Pourtales just completed, there is, perhaps, too evident an attempt to reproduce Grecian details in more severity than is quite compatible with modern Domestic Architecture; but when the whole is so elegant as this example, and when no really essential part of the design is sacrificed to produce this effect,

the introduction of these Classic details is pardonable. In the museum and studio which Kleuze built for Count Racyzinski, the principles of Greek Art are carried far beyond what are found in this palace,—to such an extent, indeed, is Grecian feeling carried there, as to amount to affectation; but this is a rare circumstance at Berlin.

Another gradation of this style is illustrated in Woodcut No. 233, which, though situated at Dantzic, is by a Berlin architect; and though ornamented with Classical details, approaches more nearly to Mediæval feeling. This tendency is, in fact, the rock on which the style will probably be shipwrecked. Already the Romantic School in Germany is obtaining immense influence; and although all the attempts they have hitherto made in Gothic Architecture have proved utter failures, still the architects are working hard, and, with the examples of what has been done in France and England before their eyes, may easily produce as good forgeries as we have done—if they wish it. Let us hope they may be saved this last and lowest stage of architectural debasement.

DRESDEN.

Only two buildings of any importance have been erected at Dresden of late years, besides Schinkel's Guard-house mentioned above. The first of these is the new theatre; the other the new picture gallery; both by Semper.

The arrangement of the picture gallery is copied from that of the Pinacothek at Munich, with only such changes as the necessities of the situation rendered necessary. The front towards the Zwirner has much the same galleried arrangement; but the openings are smaller, the piers more solid, and anything more in accordance with common sense would have been strangely out of place in a façade forming as this does the fourth side of the Zwirner Court. On the front towards the river a third tier of galleries has been erected, lighted from the roof, which gives—externally—a considerable degree of dignity and solidity to the principal storey; and the centre is an elegant and an appropriate piece of design, though a little wanting in the dignity its situation seems to demand.

Little or nothing has been done in Dresden in Private or Domestic Architecture that is at all worthy of admiration. The new buildings are as commonplace as the old, any imposing effect they may possess arising from their dimensions alone; while occasional copies of Venetian palaces, and attempts in the style which modern German architects call Gothic, betray an unsettled state of public opinion in this matter, and a want of purpose which can only lead to confusion and to bad taste.

VIENNA.

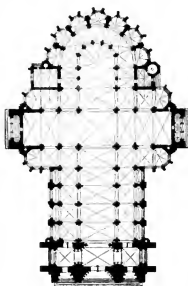
The modern buildings of Vienna do not show that its inhabitants have profited by the movement taking place in other parts of Germany, or care more for the display of architectural design than their forefathers did at any period since the beginning of the sixteenth century.

It is true that in a fit of enthusiasm arising from the acquisition

of the statue of Theseus by Canova, they, too, determined on having a Walhalla in which to enshrine their purchase, and forthwith commenced the erection of a copy of the so-called Temple of Theseus at Athens. Had they paused to investigate the matter a little, it would probably have been found that the temple they were copying was really dedicated to Mars, and that the shrine of their new god was of a different shape and style altogether. But the Viennese are not antiquarians, so this did not matter. Had they been architects, they would have known that to be seen to advantage the Grecian Doric Order must be placed on a height where it can be looked up to, and the Grecians in consequence always chose elevated sites for their temples. There are no hills in Vienna suited for this purpose; but there are some grand old bastions which would have formed the noblest terraces for such a building, had the idea suggested itself to them. The next best place was the crest of the glacis, where it could have been approached, though in a far less degree, on an ascending plane; but even this advantage was neglected, and they finally determined on erecting it at the bottom of the ditch!

When the Edinburgh people placed their Doric institution at the foot of the mound, it was as great a mistake as they well could make; but a Doric peristylar temple at the bottom of the ditch of a fortress surpasses everything that has yet been done in the way of architectural bathos.

We may hope there has been an improvement in taste and judgment since then, as they are now erecting on the glacis a Gothic church, which will really be a very beautiful building. As will be seen from the plan, it is practically a copy of Cologne Cathedral on a reduced scale, being 295 ft. in length externally, with a nave 94 ft. wide internally; and inside the transept it is 160 ft. from wall to wall; so it is really a first-class church, so far as dimensions go. Its details are all designed with elegance, and executed with care; so that, when completed, it will probably be the best modern reproduction of the style of Cologne Cathedral. The poetry and abandon of the older examples will be wanting; but after the completion of one or two such buildings we shall be saved from the monstrosities of that strange style which the Germans have recently been in the habit of assuming were Gothic!



234. Plan of the Votiv Kirche in the glacis at Vienna.
Scale 160 feet to 1 inch.

A still larger church has recently been erected as the Cathedral of Linz. It is 400 ft. long internally, and the transept is 188 ft. from wall to wall internally. It has only one western tower instead of two, and is neither so rich in ornament nor so complete in its details as the Viennese example. Both, however, are very grand churches, and probably indicate that the future style of ecclesiastical edifices in Austria will—as with us—be in the style of the Middle Ages. If this should be the case, of course we can look for nothing from that country but reproductions of bygone designs. In a country so intensely Catholic as Austria, this will at least be appropriate, and the adoption of this system there need be lamented only in an artistic point of view; if we may judge from the very little they have done in past ages, this cannot be a subject of deep regret to the architectural world.

The most striking, as well as the most extensive, new building in or about Vienna, is the new Imperial Arsenal; and this is all the more creditable, inasmuch as this class of design is generally handed over to the engineer, and he is left to provide as best he can for the utilitarian exigencies of the case, with little, if any, reference to the artistic effect. In this instance, though the whole is of brick, with only the slightest possible admixture of stone dressings in the more ornamental parts, the different blocks have been so arranged that their purpose is easily understood, and in order that they may group pleasingly with those around it.

It is an immense square of building, measuring about 650 ft. in front by nearly 2000 ft. in depth. At each angle is a great casemated barrack. Between these the longer sides are occupied by blocks of storehouses. Opposite the entrance is the chapel, and in the centre are the cannon-foundry and small-arms workshops.

Besides these, fronting the entrance, is the armoury;—by far the most ornate portion of the group, and a very pleasing specimen of the style of brick architecture adopted by the Italians in the Middle Ages. It may be objected that the style is too ornate, the parts too small and florid for the purpose to which they are here applied; and it is true that a more severe and massive style would have been more appropriate to the purpose;—but as it is in a courtyard, and not seen from the outside, this objection is hardly tenable, the effect of the whole being so pleasing that we must overlook such slight failings in this in-artistic country.

At Pesth a Jews' synagogue has just been completed in the same style, and by the same architect,—J. Förster; which is the most striking building in that city. There is an affectation of Orientalism in the balloon-like cupolas—certainly not Oriental—which crown the towers and angles, and, being gilt, detract considerably from the otherwise sober appearance of the structure. Notwithstanding this, nothing can well be more elegant than the mode in which the various bands of different coloured bricks are disposed, and the way in which they bind the various parts of the design together. The stone-work of the windows is also more than usually well designed, and in



235.

View of the Synagogue at Pesh.

perfect harmony with the details of the brick edifice to which they belong. Greatness and grandeur are of course unattainable in this style and with this material, but the mode in which it is used at the Munich and other railway stations in Germany, with the taste displayed in this Synagogue, and in the Arsenal at Vienna, shows that a very considerable amount of elegance can be attained by the use of different coloured bricks with a slight admixture of stone and of terracotta ornaments; and there is no reason why these materials should not be employed with the most modern as well as with the Medieval styles.

Although there are, besides this, some very large and important buildings in Pesh, and some very picturesquely situated ones in Buda, there are none which can pretend to any architectural beauty. They are all according to the usual recipe,—pilasters and plaster, adorned with white or yellow wash, relieved by green Venetian blinds. At Vienna another element is introduced, very destructive of architectural effect, in the double windows which it is found necessary to employ everywhere. The outer ones in consequence being flush with the wall, there is no apparent depth of reveal to the windows,

and the whole is as flat and unmeaning as it well can be. When we add to this that all the walls are stuccoed and all the more delicate mouldings choked by repeated coats of whitewash, it is easy to understand how vain it would be to look for any very pleasing examples of Architectural Art among the modern houses of Vienna or its neighbourhood.

The great monastic establishments which still exist in various parts of the Austrian dominions would have afforded numberless opportunities for architectural display among a more artistic people; but none of them are remarkable for any evidence of taste in this direction. One of the oldest and most celebrated is *Klosterneuberg*, near Vienna. In the year 1730, the Emperor Charles VI. commenced the present buildings on a scale of such magnificence that they are still incomplete; but the parts that have been finished show so little real artistic feeling, that this is hardly a subject of regret.

The most splendid of these establishments is, perhaps, the great Convent of *Mölk*. It stands on a rock overhanging the Danube, in a situation so grand and so picturesque that it is difficult to understand an architect not being inspired by it to do something beautiful. Notwithstanding this, it would not be easy to point out any building in Europe of the same pretensions which possesses so little poetry of design as this. Its flanks externally are not unlike those of the *Escorial*—plain, barrack-like buildings of great extent, pierced with numberless windows, but without any ornament. The church occupies the same relative position as that of the *Escorial*, with a dome in the centre and two western towers; and these are crowned by the contorted bulbous spires so prevalent throughout the Austrian dominions.

Several of the smaller establishments, perched on rocks, or nestling in secluded valleys, are picturesque or pleasing, in spite of the style in which they are built. But not one, so far as is known, is worthy of admiration as an object of Art.

What we really miss most

in reviewing the Architectural history of Germany are the village churches and the country seats of the noblemen or squires, which form the bulk and the charm of the Architectural objects of this country. Even in the Middle Ages the village churches of Germany were little more than plain halls, without aisles or clerestory,—polygonal at one



236. German Spire at Prague.



237. German Spire at Kattenburg.

end, with a few tall, misshapen windows at the side, and a rude wooden roof over all. The single spire, which was intended to be their external ornament, was generally placed on a square tower without buttresses or break, and the transition between the two parts was seldom even broken by battlements or pinnacles. After the Reformation, as may be easily understood, it was worse. The body of the church was little better than a barn; the tower was, if possible, even plainer; and its spire, always in Austria and generally elsewhere, of the curious bulbous character which is even now so common;¹ their only merit being that no two spires are like one another; but though the strange unmeaning vagaries in which the architects have indulged may be creditable to their ingenuity, they are by no means so to their taste.

The country seats are even more objectionable. With the fewest possible exceptions, the feudal castles are deserted and in ruins, and there is nothing to replace them. A man may travel from the Baltic to the Adriatic without seeing a single gentleman's seat or country house worthy of the name. If a nobleman has a mansion where he can reside on his lands, it is only like a large public building at the end of a village, with an avenue of well-clipped limes leading from the front door to the public road, and perhaps an acre or two of ground laid out as a formal flower-garden. The most beautiful sites in the loveliest scenery are utterly neglected. The conviction is everywhere forced upon us that the Germans as a people have none of that real appreciation of the beauties of nature which in this country goes so far to redeem our want of knowledge or of true feeling for Art in general. The country has no charms for them, and it is very questionable whether Art can be true or deep-felt without a love of Nature. At all events, in so far at least as Architecture is concerned, it seems in Germany to be an exotic forced into a transitory bloom in the hot-beds of the cities, but having no real existence beyond their walls—a matter of education or of fashion, but not a necessity, or a thing in which the people really take a deep or heartfelt interest.

BERNE.

Although Switzerland is not in reality a part of Germany, it seems hardly worth while to devote a separate chapter to a country which, during the three hundred years over which this history extends, has only erected one building of sufficient importance to be mentioned. Being principally Protestant and generally poor, it is hardly to be expected that any new or important churches would be found; and the cities are, as a general rule, hardly important enough to indulge in any great display in their municipal buildings.

Recently, however, they have erected a Federal Palace at Berne, which is perhaps the best modern specimen of the Florentine style that has yet been attempted. The centre especially is bold and well de-

¹ Woodcuts 236 and 237 are selected as favourable specimens of these spires—if they may be so called.



238.

Federal Palace at Bern. From a Photograph.

signed; and with its deep balcony, and the range of open arches under the bold cornice, it has a dignity worthy of the style, and very superior to anything of the same class at Munich or elsewhere. The wings are hardly equal to the dignity of the centre. So bold a cornice suggests and requires something more important than a plain tiled roof; and the centre,—at least over the great hall at the end,—ought to have had as bold a parapet as the central division of the front. These, however, are minor defects; and, taken as a whole, it is one of the most successful, as it is, for its situation and purposes, one of the most appropriate buildings of the present day, and forms a singular and instructive contrast with the Parliament Houses which we were erecting simultaneously and for the same identical purposes.

Putting on one side, for the present, the question whether the Swiss building is not too literal a transcript of the Florentine style, a comparison of the two buildings fairly raises the question which of these two styles—assuming we must adopt one of them—would be most suitable for the situation at Westminster.

Taking the outline of Barry's river façade (Woodcut No. 208) as a basis for comparison, let us suppose a block like the centre of the Bernese Federal Palace placed at either end, where the Speaker's and Black Rod's houses now stand; between these a central block, more ornate, but of the same height as the wings, and occupying the same extent of ground as the centre division of the Parliament Houses; and then these joined by curtains four stories in height, like that at Bern, but more ornamental in character, which their being recessed would render quite admissible. Which would have been the nobler building, or the best suited to our purposes?

The first answer that occurs is, that, though so much larger in bulk, owing to the increased height, the Florentine building would have been very much cheaper—probably to the extent of one-half, in the architectural parts at least.

The next reply would be that it is more suited to our climate, having no deep undercuttings to be choked up with soot, and no delicate mouldings to be eaten away by damp and frost.

The Bernese style would have combined perfectly with towers of any height, or domes of any extent.

It would have produced a far more massive and a manlier building, and therefore more appropriate to its purposes, than one carried out in the elaborately elegant but far too delicate style employed in the Westminster design.

Internally it would have demanded painting and sculpture, not of the Mediæval type, but of the highest class the art of the day could furnish; while the furniture and decorations must all have been of the most modern and most elegant patterns.

In addition to these advantages, the Hall and the Abbey would have been left in the repose of truth and beauty, not, as they now are, in competition with a modern rival imitating their ornamentation, but far surpassing them in richness of display.

A few years hence, few probably will dispute that a simpler, a more massive, and more modern style would have been far better suited for our Parliament Houses than the one adopted. Whether it ought to be the one the Swiss have employed is a question not so easily answered. It seems however clear that they are nearer the truth than ourselves; and with some modifications their style might be so adapted as to make it approach more nearly to what is really right and truthful than anything which we have yet seen in modern times.

BOOK VI.—NORTH-WESTERN EUROPE.

I.—BELGIUM.

THERE is a group of small nationalities extending from the northern boundary of France to the Arctic Sea, along the shores of the ocean, which may safely be grouped together; and, as far as their Architectural history during the Renaissance period is concerned, may be disposed of in a short chapter—not on account of any affinity of race or similarity of taste which exists among them, but simply because during the three centuries to which this volume is confined they have done very little indeed in the way of artistic building, and done that little badly.

Much could not be hoped for from the Scandinavian group, inasmuch as, during the Middle Ages, when all the world were cultivating with success the art of Architecture, they erected very few buildings that were remarkable in any respect, and scarcely one that was original. Indeed they showed no taste for architectural display during that period, and it is consequently hardly to be expected that they should have developed any at an age when all the more artistic nations of Europe were forsaking the wonderful styles they had for centuries been bringing to perfection. Still less could it be supposed that they should either have invented a new process, or done anything worthy of notice by that mode of proceeding which had proved so fatal in every other land.

The honest Dutch are, and were, too matter-of-fact a people ever to excel in any decorative art. In Painting they delighted in reproducing nature literally but truthfully, but with the rarest possible exceptions never went beyond the limits of what might have been observed; so in Architecture, good, honest, prosaic buildings, suitable for the uses for which they were designed, were all they cared to erect.

Better things might have been expected of the Belgians. During the Middle Ages, architectural magnificence was in Belgium certainly one, if not the principal, mode of display; and the country is even now covered with the gorgeous monuments which resulted from this taste. It is true her cathedrals are neither so pure nor so artistically perfect as those of France or England, and that her town-halls are, generally at least, more remarkable for their dimensions and for the richness of their details than for the beauty of their design; but still the Belgians were a building people, and strove always to build ornamentally. It is not at first sight very apparent why they should suddenly have ceased to indulge in a pursuit they had followed with such zeal, nor why, when they did return to it, they showed less

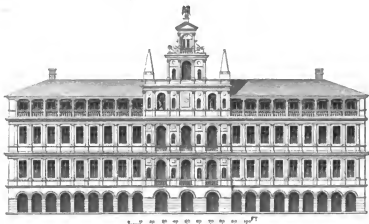
aptitude for it than is to be found in any of the neighbouring lands. It may partly be that the Belgians are not essentially an artistic people ; but a great deal is also due to the practical loss of liberty which resulted from their connection with Charles V., and from their falling into the power of Philip of Spain, whose iron rule put a stop to any national display. The loss of their commerce also, in consequence of the discoveries of Columbus and Vasco de Gama, deprived them of the means, even if they had had the taste, to continue the lavish expenditure they had hitherto indulged in on objects of architectural magnificence.

To this must be added that the Reformation, although it did not change the outward form of the religion of the people, still destroyed that unhesitating faith in an all-powerful and undivided Church, which could do all and save all, and which consequently led men to lavish their wealth and devote their talents to purposes which were sure of some reward at least in this world, and certain of undoubted recompense in the next.

Antwerp was the only one of the Belgian cities where the water was deep enough opposite her quays to be used by the larger vessels which, in consequence of the discoveries of the Spaniards and Portuguese in the sixteenth century, came to be employed in long sea voyages ; and she consequently retained something of her ancient prosperity long after Ghent and Bruges had sunk into comparative insignificance ; and as a natural consequence of this, Antwerp has more the appearance of a modern town than any of her rivals except Brussels, and possesses some buildings in the Renaissance style which are worthy of attention.

The principal of these is the Hôtel de Ville, erected in 1581 by a native architect of the name of Cornelius de Vriendt, and a very fair specimen of the style of the period. The width of the façade is 305 ft., with a height to the top of the cornice of 102 ft. This height is divided into four stories ; first, a bold, deep arcade, then two stories of windows of large dimensions, but each of them divided into four compartments by large heavy stone mullions, which not only prevent their appearing too large, but make them part of the whole design, and part of the surface of the wall in which they are placed. Each window is separated from the one next to it by pilasters, and above that there is an open gallery under the roof, with square pillars with bracket capitals in front. The employment of this open loggia in this position is most successful, as it gives shadow without unnecessary projection, and seems to suggest the roof, while it appropriately crowns the walls.

The building is more highly ornamented in the centre, being adorned with double columns between each window, and rising to a height of 185 ft. to the head of the figure which crowns the pediment, though this it must be confessed is the least successful part of the composition. The obelisks on either side are not only unmeaning but ungraceful as used here, and the whole has a built-up appearance very unlike the quasi-natural growth of a Mediæval design applied to



239.

Front Elevation of Town-hall, Antwerp.

the same purpose. Notwithstanding this, there are few more successful designs of its class. It is free from all the extravagances which disfigure structures of its kind and age; and equally free on the other hand from the affectation of grandeur which so often deforms later buildings. Each storey here is complete in itself, and there is not a single ornamental feature applied which is either more or less than it pretends to be.

In the present state of feeling on this subject it would be the height of rashness to compare this town-hall with its Mediæval rivals. But, take away their towers, and place them where they can be equally well seen, and the Antwerp Town-hall will stand the comparison as well as any other building of its age or class. Except to the extent to which the design of any one man must be inferior to that of many, and that a foreign style must be more difficult than a native one, it meets most of the requirements of good and truthful Architecture.

The same praise cannot be accorded to the churches built in the same age. The principal one at Antwerp is that dedicated to San Carlo Borromeo; but, like all churches built by the Jesuits, its façade is overloaded with misplaced ornament. Internally there is something majestic in the simple vault of the nave, resting on a double tier of arcades, reproducing much of the old Basilican effect; but this is again spoiled by the tasteless extravagance of the details everywhere, by whitewash where colour was wanted, and by gaudy colours where simplicity and repose would be far more effective.

Although the Belgians, from the circumstances above enumerated, have no buildings erected during the Renaissance period which can rank with those of more artistic countries, still it is impossible to wander through the land without appreciating the strong feeling for the beauties of Art on the part of the people, who, under more favourable

circumstances, might and would have done things of which they might justly have been proud.

In their churches the marble altarpieces are structures often as large as Roman triumphal arches, and frequently in very much better taste: and the rood-screens and pulpits are frequently equal, if not superior, to similar examples found elsewhere. In the construction of these edifices, too, they seldom fall into the absurdities too frequently met with in other countries. When, for instance, the nave of a church is separated from its side aisles by pillars supporting arches, it is the



240.

View of St. Anne, Bruges. From Wild's 'Architectural Grandeur.'

rarest possible thing to find a fragment of an entablature on the top of its pillars. The archivolt rises boldly from the capital, and with a vigour that shows that the pillar is not a sham, but really an essential and useful part of the construction of the edifice.

In the church of St. Anne at Bruges the entablature over the arch is heavy beyond all precedent, and supporting a heavy clerestory, and all this upon a simple Doric shaft; but the effect is most satisfactory. The spectator feels not only that the support is sufficient, but that the architect knew it would be so, and secured the safety of his superstructure by the immense solidity of the parts he employed.

Though in a less degree, the same remark applies to the nave of the church of the Carmelites at Ghent, and to most of the churches of the Renaissance age in Belgium. They may not be models of taste, but they are not the tame apings of classicality which are so offensive in other countries. It was hardly however to be expected that, at an epoch when neither Italy nor France could produce an ecclesiastical edifice which commands unqualified admiration, a small country situated as Belgium then was could do much. All that can be said is, that in so far as church-building was concerned she probably occupied the same relative position during the Renaissance period that she had attained to during the existence of the true styles.

Though BRUSSELS has been so long a capital, it possesses no buildings of any architectural importance which have been erected since the Reformation, nor a single modern church which a traveller would step out of the street to visit in any second-rate capital of Italy. The Royal Palace is of very ordinary architecture both externally and internally; and that which a "*Patria grata*" erected for Prince William of Orange is as commonplace a dwelling as can well be conceived; although there are some handsome apartments inside, their beauty depends far more on elaboration and richness than on any of the higher characteristics of Art.

The buildings in which the "Chambers" meet were erected under the Austrian rule, and are not unpleasing specimens of the usual portico style, which became stereotyped throughout Europe at that period. In the new quarter of the town are some fair imitations on a small scale of the style of Domestic Architecture prevalent at Paris, but nothing either original or very well worthy of admiration; and of course there are some churches in the "*style Gothique*" which would make an English archæologist shudder if he came within a mile of them.

The new buildings erected for the Universities of Liege and Ghent afforded an excellent opportunity for architectural display, had there been any one with talent sufficient to avail himself of it. These structures are spacious, surrounded by large open spaces, and are at least intended to be of a monumental character. All, however, that has been produced in the way of architecture externally is a large portico with a crushing pediment in the one instance, and an equally large portico without any pediment in the other; and, internally, some halls and lecture theatres of very questionable taste.

To this very meagre list might be added the names of some churches,—supposed to be Gothic,—recently built, or now in course of erection; but they are such that it will be better taste to pass them over in silence. It is too evident that Architecture does not at present flourish in this industrious little corner of the earth. Still the knowledge of what they have done in this art during the Middle Ages, and of what they are now doing in Painting, affords every encouragement to hope that the Belgians may again resume the rank they are entitled to among the ornamentally building nations of Europe.



241.

Front Elevation of Town-hall, Amsterdam.

II.—HOLLAND.

There is only one edifice erected in Holland during the Renaissance period to which the Dutch can point with much pride as exemplifying their taste for architectural magnificence; and, if bigness is merit, the Stadthaus at Amsterdam is entitled to the position it claims in all books on Architecture. It has also the virtue of being a stone building in a city of brick, and in a country where every stone employed has to be imported by sea; but, as an architectural design, it can only rank with the Caserta or the Escorial, and other buildings remarkable for their dimensions, but also for their want of Art.

Its dimensions in plan are 310 ft. by 260; and, in height, there is a basement storey of 16 ft., raised on a stylobate or steps 4 ft. high; and, above this, two ranges of pilasters, which are spread all over the building—these occupy each 40 ft. in height, and together cover four stories of windows. As if to make the disproportion between a basement of 16 ft. to a building 100 ft. in height even more apparent, there are seven small entrances, symbolical of the seven provinces, in the principal façade; and as these are little more than 10 ft. in height to the top of the arch, it seems a puzzle to know how the inhabitants or traffic suitable to so large a building could be got in by such small openings.

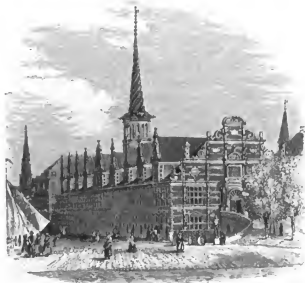
Internally, the arrangements are better than the exterior would lead us to expect. The four staircases at each end of the corridor are singularly convenient, even if not so artistic as one great staircase would be, and the position of the great hall in the centre is well chosen

both for convenience and effect. The hall itself, which is 62 ft. wide by 125 ft. in length, is really a beautiful apartment, and by far the best feature in the building; though some of the minor apartments are also good in proportion, and elegant in their details.

As Amsterdam is a mere modern city than Delft, Leyden, or Haarlem, and indeed the youngest of Dutch cities, inheriting, consequently, no churches from the Middle Ages, it has had to build these it required since the Reformation. There are the "Oude" and "Nieuwe Kercken,"—large and pretentious edifices, but possessing no merit either in arrangement or in architectural design: and the other churches of the town—as indeed all the Reformed churches of Holland—are plain utilitarian buildings, designed mere to contain the greatest number of worshippers at the least possible cost, than to display architectural taste, or to ornament the situations in which they are placed.

III.—DENMARK.

The Danes—or some one for them—built one or two respectable and interesting ecclesiastical edifices in the round-arched Gothic style, during the early ages of the introduction of Christianity among them, but nothing in the Pointed styles; and, since that period, it need hardly be said that Architecture, as a fine art, has not existed among them. The palaces at Copenhagen are large, and, it may be, convenient buildings; the churches are sufficient for their congregations, but pretend



212. View of the Exchange, Copenhagen. From Marryat's 'Jutland and the Danish Isles.'

to nothing more; and the country houses of the gentry—for the Danes do reside on their properties—are neat and cheerful residences, but without—in any published instance—pretending to architectural display.

The one building of which the inhabitants of Copenhagen pretend



Castle of Fredericksborg. From Marryat's 'Jutland.'

to be proud is their Exchange, erected by Christian IV. about the year 1624. So much indeed do they cherish it, that when, in the year 1858, it was transferred to the mercantile community by the government, it was expressly stipulated that no change should ever be made

in it which could detract from the character of the edifice. Even with this challenge it is difficult to discover wherein the beauty of the building consists. The principal façade is a characteristic specimen of the style, and free from affectation, but not beautiful in itself; and the seven great dormer windows which ornament its flanks are certainly too large for their position; and the wall between them not being broken up so as to carry their lines down to the ground, they look as if merely stuck on, without any apparent connection with the building. The spire of twisted dragons' tails is a capriccio pleasing enough in its way, but hardly good Architecture.

To us the Castle of Elsinore is interesting from the associations connected with its name, and also from its architecture being the exact counterpart of that found in Scotland at the same period. We could almost believe that some parts of the Castles of Edinburgh or Stirling were built by the same architects; and Heriot's Hospital and other buildings might be quoted as proving an almost exact similarity of style between Denmark and Scotland during the Jacobean period of Art. In itself, too, the Castle of Elsinore is a picturesque pile as seen from the sea, and has a certain air of grandeur about it which pleases, though its details will not bear too close inspection.

The Castle of Fredericksborg (Woodcut No. 243) was erected by the same Christian IV. who built the Exchange at Copenhagen; and though in the same quaint style, and with the same detestable details, is a palatial and picturesque edifice. When seen at a little distance its numerous spires group gracefully together, and accord well with the varied plan and outline of the building. It has now also a certain air of antiquity and a weather stain about it, which cover a multitude of defects; but its details are far from being pleasing, and all that can be said in its favour is that it is a most characteristic specimen of the art—or the want of art—of the country in which it is found, and is another warning not to look for true Art among people of such purely Teutonic blood as our consins the Danes.

IV.—HAMBURGH.

The great fire at Hamburgh, in the year 1842, afforded its wealthy citizens an opportunity of improving the appearance of their town, of which they have availed themselves to a very creditable extent. As this has been done chiefly under the influence of the example set them at Berlin, and under the guidance of the same architects, the new streets show the same appreciation of the requirements of Domestic Architecture which characterizes the new quarters of that city.

In the new streets, every house, whether great or small, is a separate and distinct design, and, with scarcely a single exception, it is a design which exactly reproduces externally the internal arrangements of the building. There is no instance of great pillared porticoes darkening the light, or concealing shop-fronts; no instance of tall unmeaning pilasters running through two or three stories, vainly attempting to make small things look large. When cornices are used

they are always at the top of the house, and represent the eaves of the roof; and the architectural features are wholly confined to the doors, windows, and string courses, and other essential parts of the construction. It is true that the ornaments are not always in the very best taste, nor so elegant or so well applied as those found at Berlin; but the general result is most satisfactory. The streets have all that variety and individuality which we admire so much in older towns, combined with the elegance and largeness which belong to their age; and they as fully and as clearly express the wants and aspirations of the nineteenth century, as any of the buildings of the Middle Ages do those of the period in which they were erected.

On the other hand, it may be confessed that in the Post Office, the National Society's buildings, and one or two private edifices, the German architects have attempted what they call Gothic, and have failed as utterly as they generally do when they dabble in this style. Not only are their details bad, but the outline of the buildings is always so awkward and unmeaning as to obtrude most unpleasantly on the otherwise harmonious result of the rebuilding of the city.

So complete is their ignorance of the principles of Gothic Art, that it is no matter of surprise that an English architect bore off both prizes in the competition for the rebuilding of St. Nicholas's Church and for the new Town-hall. These are already far advanced, and when completed promise to make the good Ilamburghers believe that the nineteenth century is a myth, and that the clock of time has stood still for the last five centuries—if not in cotton-spinning and engine-making, at least in all that concerns Architecture, or its sister Arts.

V.—SWEDEN AND NORWAY.

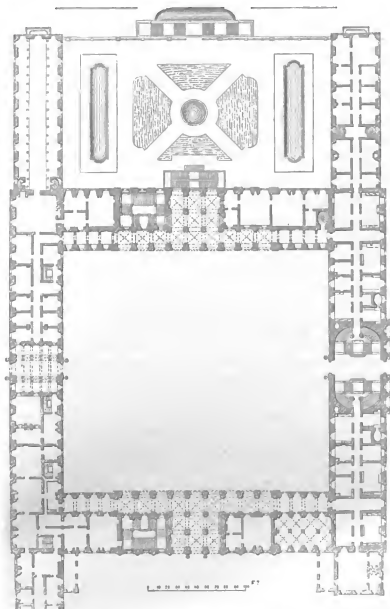
If any buildings of the Renaissance period exist in Sweden or Norway which are worthy of admiration, all that can be said is that travellers have omitted to describe, or artists to draw them, and that they have been equally ignored by the writers of guide-books.

The truth, however, most probably is, that, like their kindred the Danes, they are not an artistic,—certainly not an architectural people.

The one building of theirs known as worthy of admiration is the Palace at Stockholm, commenced by the celebrated Charles XII. in the year 1698, from the designs of a French architect, Nicodemus de Tessin. Considerable progress was made in the works during the next seven or eight years; but the expenses in which his wars involved the King, and finally his defeat at Pultowa, arrested their progress, so that they were not so far completed as to render the palace habitable before 1753; but no departure seems to have been made from the original design then or at any subsequent period.

The main body of the building is a nearly square block, 378 ft. by 382, enclosing a courtyard 247 ft. by 270. The principal façade is extended by wings to a length of nearly 700 ft.; and the general height of the great central block is 95 ft. to the top of the balustrade, from the granite basement on which it stands. In addition to these noble dimensions, the situation is almost unrivalled; one of its faces

being open to the inlets of the sea which divide the city so picturesquely into islands,—the other two, towards the town and the cathedral, are sufficiently open for architectural effect.



Its great merit, however, is the simplicity and grandeur of the whole design; in which it stands unrivalled among the palaces of Europe, with the single exception of the Farnese at Rome; and in some respects its proportions are even better than those of that far-famed palace. It is true the material here is only brick and plaster; but the parts are so large and so well balanced that we forget this defect; and it is crowned by a cornice so well proportioned to the mass below, that the eye is charmed and the feelings satisfied from whatever point of view the palace is regarded.



245.

View of the Palace at Stockholm.

There are no two buildings in the world that stand in such distinct contrast to one another, in this respect, as this Palace at Stockholm and the Winter Palace at St. Petersburg. Though nearly of the same age, not differing much in size, and like one another in situation, the superior dimensions of the main block of the St. Petersburg example is entirely thrown away by the littleness of its details, and it offends every one by the tawdriness of its bizarre decorations; while the other gains not only size, but dignity, from its noble simplicity, and pleases universally from its expressing so clearly what it is, without affectation or attempt at concealment.

It is to be regretted that, even here, the garden front is adorned with some three-quarter columns, which would be much better away; and there are some details in various parts which might be improved. But these are trifles compared with the general merit of the design; and, considering the age in which it was erected, the palace at Stockholm must be regarded as a marvellous instance of architectural purity and good taste.

The same Tessin erected several churches and country houses, either in, or in the neighbourhood of Stockholm; but in these he was not so successful as in the Palace; and none of them are such as to command the admiration which that great work extorts from all who behold it.

BOOK VII.—RUSSIA.

Peter the Great	1689	Catherine II.	1762
Catherine I.	1725	Paul I.	1796
Peter II.	1727	Alexander	1801
Anne	1730	Nicholas	1825
Elizabeth	1741		

INTRODUCTION.

ANY one who is aware how correctly and how infallibly Architecture must express the feelings and aspirations of a people, however they may attempt to disguise them, will of course be prepared to expect, in Russia, a history of the Art differing in many essential particulars from that of any of the other countries of Europe.

Down to the time of Peter the Great the civilization of Russia was more essentially Asiatic than European; and her Architecture was that peculiar form of the Mongolic type which has been described in the 'Handbook of Architecture.' Occasionally, it is true, in later times, pilasters and other quasi-Classical forms were sometimes adopted from the styles of the Western world; but they were used without the least reference to their meaning, or to their appropriateness to the situation in which they were placed.

With the foundation of St. Petersburg in 1703 a new era commenced. Her rulers then determined that Russia should take her place among the nations of Europe, and have worked steadily and powerfully towards the attainment of this object during a century and a half. Success has attended their efforts to at least this extent, that in St. Petersburg everything bears outwardly the aspect of Western Europe; and he must have a keen eye who can detect anything in her Architecture that would lead him to believe he was so far north as the banks of the Neva, and nearly thirty degrees eastward of Paris. Whether this exotic civilization extends far beneath the surface or not remains to be seen; and it may well be questioned whether it has spread widely over the empire, or is only confined within the walls of the modern capital.

So far as can be gathered from such data as are available, Moscow still clings to her Tartar feelings, and Kieff remains lethargic, with more of the East than the West in her modes of thought. But, though the effect may not yet be apparent, there is a leaven spread over the old Tartar crust, which may penetrate deeper, and may eventually work a change; but, till it does so, the history of the European form of

Russian civilization, and of her modern Art, must be chiefly confined to the capital.

In so thoroughly centralized a monarchy, the history of the capital is generally that of the empire; and, in this respect, St. Petersburg may be said to be even more essentially the representative of modern Russia than Paris is of France. What was done in the provinces had first been done in St. Petersburg, and was copied with more or less exactness as the place was more or less remote; but it is only in the capital that the series is complete, and the history of Art there is the history of Art throughout the length and breadth of the land.

Unfortunately the Art we find at St. Petersburg is, like her civilization, essentially exotic. The architects who erected the greatest number of buildings were Tressini, Pastorelli, Rossi, Guarenghi, and other Italians. Thomond and Montferrand were Frenchmen; and Speckler and Klenze are Germans; and though the names of one or two Russians do occasionally appear on the list, it is a fact that nine-tenths of the buildings of the capital were designed and carried out by foreigners, and the Russians who designed the remaining tenth—if it amounts to so much—were only tolerated because they adopted the principles and copied the details of their foreign instructors.

It is also a misfortune for Russia that she began to build in the Italian style just when the art in Europe, and especially in Italy, was at the lowest ebb of degradation,—when Borromini and Guarini had contorted everything to madness, and men neither could copy what was beautiful nor invent anything that was reasonable. Europe has since attained proficiency in the first-named branch, and Russia has followed slowly in her wake. Had it been possible for her to have worked out her own civilization, she might perhaps have excelled in the latter walk and surpassed the other European nations in the exercise of true Art. But that was not the path she chose, either because the Russians are not an architectural race, or because the form of her government was such as to repress the development of artistic excellence on the part of its subjects. Judging from the experience of what they did from the time of the foundation of Kieff till the accession of Peter the Great, it would appear that the first suggestion affords the true solution of the difficulty.¹ During the whole of that long period they did not erect a single building remarkable for constructive excellence—though they had always the dome of St. Sophia before their eyes—nor one showing any true appreciation of the principles of architectural design.

It is true there is always an amount of local character and fitness about their buildings which pleases, and the decoration is purpose-like, even when not beautiful. But in the whole Russian Empire there is not an edifice which will stand a moment's comparison with the contemporary buildings of Western Europe erected during the Middle Age period.

In other respects St. Petersburg is much more fortunately circum-

¹ See 'Handbook of Architecture,' pp. 978 and 991.

stanced for architectural display than any of the older cities of Europe. When Peter the Great determined to found the capital of his vast empire on the banks of the Neva, there was hardly a fisherman's hut to be seen on the spot. It was a desolate, uncultivated plain, on the banks of a noble river; but, with nothing whatever to impede the alignment of his streets, or to prevent his planning the new town so as to suit any visions he might have of its future greatness.

The intention of the founder evidently was that the city should occupy the islands between the Neva and the Nefka, where the fortress stands and his own palace stood. The south side of the river was to be occupied by the dockyard, and the establishments belonging to it, these being the most important buildings in the empire in the estimation of Peter the Great. In fact, the object of fixing the capital on this spot was to obtain access to the sea, and to provide suitable accommodation for the development of the future marine of the empire.

The superior spaciousness of the site on the south side, coupled with the difficulty of communicating with the rest of the empire across the river at certain seasons of the year, led to a gradual abandonment of this plan. This change further led to the curious anomaly that the three great streets dividing the town into four quarters do not radiate from the palace but from the dockyard, which still remains the principal object on this side of the river, occupying the best and most prominent position.

Barring this defect, the whole plan of the city is judicious and noble. The great river that sweeps through it, varied with its islands, and the canals that intersect it in various directions, prevent anything like monotony arising from its regularity; and the noble quays that line the river-side, and the splendid edifices rising everywhere behind them, give to the whole an air of grandeur and dignity—at first sight, at least—which is unsurpassed by any city of Europe.

It is only when we come to examine a little more closely these nobly planned edifices that we feel the want of Art shown in their execution, and we are soon satiated in consequence of the endless repetition of the useless and generally inappropriate features which form the staple of their design.

I.—ECCLESIASTICAL.

It is said there are a thousand or fifteen hundred churches in Moscow, while there are hardly one-tenth of that number in the new capital—a discrepancy arising, not from any difference in the intensity of religious feeling, but from the circumstance that in Moscow the churches are mere oratories, as they are in all truly Greek communities. A cell a few feet square, with a picture of the Virgin, is a church at Moscow; and that city possesses at least four cathedrals, the largest of which would not suffice for the church of a small parish in any other part of Europe.

At St. Petersburg, on the other hand, the churches are on the European scale, and many of them vie in dimensions with the proudest monuments of modern times.



216.

Church in the Citadel, St. Petersburg. From Durand, 'Voyage.'

The oldest church in St. Petersburg is that erected or begun by Peter the Great at the Citadel. Its plan is that of a Latin Basilica, about 200 ft. long by 100 ft. in width, divided internally into three aisles, and presenting no remarkable peculiarity inside. Externally there is one dome on the roof which suggests its connection with the Eastern Church, and at the west end a tall slender spire, reaching a height of 364 ft., a feature borrowed from the West, but in Russia, and in this form, especially suggestive of the Neva, for it is not to be found anywhere far from its banks. The details of the church are generally coarse, and more badly designed than would be expected from its architect, Tressini, who, as an Italian, even in that day, ought to have known how to draw a Doric Order.

Had Peter the Great had his own way, every subsequent church in his empire would have been a Latin Basilica like this; and there are several of this age in various parts of the empire, which are copies more or less exact of this typical edifice. But the old Tartar feeling was not so easily extinguished; and when Rastrelli, in 1734, was called upon to design the Smolnoy Monastery near St. Petersburg, he reverted to the old Muscovite type, but clothed it in the tawdriest finery of the then fashionable French school. The church, which stands in the centre of a magnificent square formed by the monastic buildings, is 245 ft. in length from east to west by 198 ft. across the transepts, and the central dome reaches a height of 315 ft.—or nearly that of our own St. Paul's. It has not, however, one feature worthy of admiration, and the only thing that can be said for it is, that its five domes are Russian in idea; but if their ornamentation is characteristic of Russian civilization in that day, "*tant pire pour elle!*" It would be difficult to find in Europe anything so really bad as this.

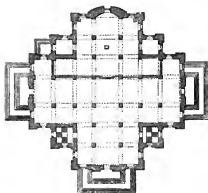
It cannot be denied that this design has some architectural merit, notwithstanding these defects. The church stands well in the centre of a great court, surrounded by buildings which are evidently and honestly the residences of the ecclesiastics attached to its service. The general outline of its five domes is pleasing, and they group picturesquely with each other, and with the buildings surrounding them; above all, they are Russian, affecting to be nothing but what they are, and their truthfulness goes far to redeem most of their other defects. It would be a great misfortune if anything similar were to be done again; but it would be difficult to find a more essentially characteristic representation of Russia and her Art at the time this church was erected than this fantastic monastic establishment.

The rival monastery of St. Alexander Newski, a little further up the river, is one of the few buildings of the capital designed by a Russian. His name was Staroff, and his design is far more sober and less objectionable than that just mentioned. The monastery was erected during the reign of the second Catherine, and the church, though designed by a native, is a basilica in form, 255 ft. long by 145 ft. across the transepts, the intersection being covered by a dome of Italian design and graceful outline, 60 ft. in diameter. At the west end are two towers of rather stunted and ungraceful forms; but both



internally and externally there is more design and a better adaptation of parts to the whole than in almost any other church in the capital. The principal defects lie in a directly opposite direction from those of the church last mentioned. It is neither Russian nor local, but simply a moderately good design of an Italian church of its age, such as might be found in any city of Italy. It looks like an Italian church transported to this place, and executed in plaster without any assignable reason, and, in consequence, loses that amount of meaning which goes so far to redeem its fantastic neighbour.

The plan of the Church of St. Nicholas is worth recording, as it is unknown in any other part of Europe, though found in the Caves at



248. Plan of the Church of St. Nicholas, St. Petersburg.

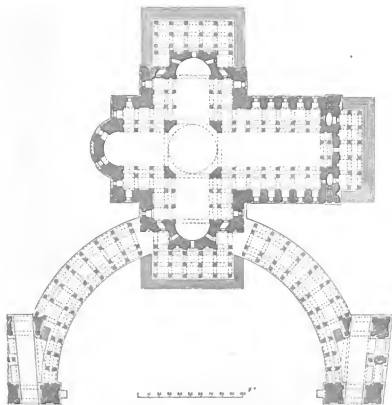
Ellora, and in many other buildings in the East. It is simple, but affording great variety of perspective, suited to the Greek ritual, which is not congregational, and does not require that the worshippers should either see or hear all that is going on. Had the centre been an octagon,—as it ought to have been,—it might have been very beautiful, and would have lent itself, better even than it now does, to the five domes which crown it externally. The little additional

width of the central arches is hardly sufficient to give the central dome the predominance which in this class of composition it ought to possess; and even internally, a more important central point would have added dignity to the whole. With these alterations, it would have become practically the same design as our St. Stephen's, Wallbrook, which, for this class of plan, is perhaps the happiest arrangement that has yet been carried into effect.

The dimensions of this church are 182 ft. each way, which, though not large, are sufficient for architectural effect when properly used, and are very considerable for a Russian place of worship, if measured by the standard of the Middle Ages.

Till the completion of the great church of St. Isaac's, a few years ago, that of Our Lady of Kasan was the principal—in fact, the Cathedral—church of St. Petersburg. It was erected, or rather completed, in gratitude for the Russian victories from 1812 to 1814, and by a native architect, Varonikin.

The suggestion of the design is taken from St. Peter's at Rome, with its circular colonnade; but the idea is here used with so much freedom, and the whole construction of the plan shows so much novelty, as to entitle its author to great credit for originality. Altogether there is perhaps no finer conception for a church standing a little

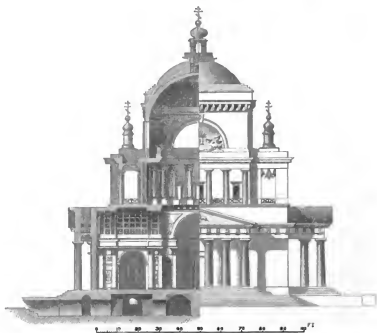


249.

Plan of the Church of Our Lady of Kasan, St. Petersburg.

back, as this one does, on one side of a street, than a grand semicircular colonnade stretching its arms forward as if to invite the votaries, and showing in its centre the well-proportioned dome that crowns its intersection; while the nave and choir are revealed, though scarcely seen, between the interstices of the intercolumniations. The church, too, is sufficiently large, being 258 ft. long over all externally, and 248 in width, the dome being 63 ft. in diameter, and 200 ft. high externally.

With all these elements of beauty, however, the effect is very considerably spoilt by the indifferent details, both internally and externally. The Corinthian columns are lanky and wire-drawn, the entablature lean, and the ornaments badly designed and worse executed. It was also a solecism to make the pillars of the colonnade the same in design and dimensions with those of the porticoes of the church. Even if it was determined they should be of the same Order, which would have been of doubtful propriety, they ought certainly to have been subordinated in some way or other. As they now stand, they are a mere screen to hide, instead of a porch to dignify, the church



250. Half Section, half Elevation, of the Church called du Rite Grec, St. Petersburg.

to which they are attached. Notwithstanding all these defects Our Lady of Kasan is a very noble church, and its semicircular portico a feature well worthy of imitation.

Besides these there are several smaller churches in the city, some of which show considerable ingenuity in adapting the Classical style to the square forms of the pure Greek Church; for either the building must be low externally, if it is to have a pleasing proportion in the interior, or the requisite height for external effect must be attained either by a sham dome above the true roof, or by making the interior so high as to be out of all proportion.

One of these churches, dedicated to St. Catherine, is very similar to Schinkel's church at Potsdam, described in page 352, but the portico is larger in proportion to the mass, and, consequently, far more pleasing, and the dome, also, is better designed. Internally its height is too great, being 120 ft., the whole area of the church externally being only 108 ft. by 150; but it is on the whole a very simple and pleasing design.

The Church Zamienie is a square of 126 ft. each way, with a recessed portico of two pillars *in antis* on three of its faces, and the whole is simply and elegantly designed; while its height externally being only 112 ft., its interior is not sacrificed to external effect.

There is a third and more elegant church, known as that of the

"Greeks," which is more elaborate than either of these, and, if its base had been a little more spread, would have formed a pleasing model for a larger church, though here again the internal height is too great for its other dimensions.

Still, the mode in which the four angle towers are worked into the composition by the upper colonnades, and the bold manner in which light is introduced by four great semicircular windows immediately under the dome, are all features which might be employed in such compositions with success, and show how easily the Russians might obtain beautiful churches in this style by only settling on some well-understood type, and being content to elaborate it, instead of rushing about looking for fresh models for every new building they propose to erect.

It certainly is to be regretted that some such system has not been adopted in reference to the designs for the great Church of St. Isaac; for, although it is one of the largest and most expensive churches in modern Europe, although the materials employed in its construction are unsurpassed for beauty and richness, and its situation is unrivalled, yet it must be confessed that the result is most unsatisfactory, and that half its advantages have been thrown away from the want of sufficient skill on the part of the architect to enable him to avail himself of them.

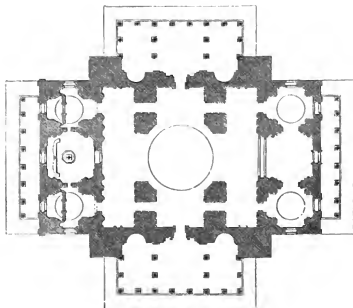
The site on which the Cathedral of St. Isaac stands seems from the first to have been destined to be occupied by the principal architectural monument of the city. It is a magnificent place, extending about 600 yards from the river's bank, with an average width of more than 200 yards, bounded at the Quay by the Admiralty on one hand and the Senate House on the other, while, at the spot where the church stands, the Riding School, with its beautiful portico, and on the other side the War Office, support; without interfering with, its architectural effect.

Three churches have already stood on this spot;—first, a wooden one, nearly coeval with the city. This was replaced by one designed by Renaldi, of great pretensions, commenced during the reign of the second Catherine; but, being left unfinished, was remodelled on a smaller and less expensive scale by the Emperor Paul, who completed and devoted it to Divine worship.

The church thus erected was far from being commensurate with the dignity of the site, or of sufficient importance to be the cathedral of such a city as St. Petersburg had become.

In consequence of this the Emperor Alexander determined on replacing it by a building which should not only be worthy of the situation, but should rival the finest churches of modern Europe in extent, and surpass them in richness of decoration.

After various attempts in other quarters he at last, in the year 1818, confided the execution of his design to a French architect, the Chevalier de Montferrand. He superintended its construction during the next forty years, lived to see it completed, and to assist in its dedication in 1858, though he died very shortly afterwards.



251. Plan of St. Isaac's Church, St. Petersburg. Scale 100 feet to 1 inch.

The church itself is a rectangle, measuring 305 ft. east and west, by 166 north and south; and, including the four great porticoes, covers an area, according to the architect's calculation, of 68,845 ft. It is therefore larger than the Pantheon at Paris (which contains 60,287 ft.), though considerably smaller than St. Paul's, which covers 84,025 ft. superficially.

Of its area 18,301 ft., or considerably more than one-fourth, is occupied by the points of support; so that, looked at from a constructive point of view, St. Isaac's stands lower than any other church in Europe, as will be seen by the following table, showing the number of feet in each 1000 of their area occupied in the churches specified by the points of support, this table being compiled by the architect himself:—

St. Isaac's	266 ft. in 1000	St. Paul's, London	170 ft. in 1000
St. Peter's, Rome	261 " "	Milan Cathedral	161 " "
Pantheon, Rome	232 " "	St. Geneviève, Paris, ..	154 " "
St. Sophia, Constantinople	217 " "	St. Sulpice, Paris	151 " "
St. Maria, Florence	201 " "	Notre Dame, Paris	140 " "

And, as shown before,¹ many of the Gothic buildings come off as low as 100 ft. in 1000, or in other words only one-tenth of their area is occupied by the points of support. Thus a Gothic architect, with so large a portion of his building appropriated to open porticoes, would certainly not have consumed more than one-third of the materials used here; and

¹ 'Handbook of Architecture,' Introduction, p. xxxvii.



252.

North-East View of St. Isaac's, St. Petersburg.

even in the Italian style the experience of the best architects shows that one-half of the quantity ought to have sufficed. Looking at the unstable nature of his foundations, and the enormous expense incurred in securing them, economy of material, irrespective of expense, ought to have been especially studied in this instance. This want of constructive skill is however detrimental, not only in this respect, but, in consequence of it, the area internally is so crowded as to lose half its effect, while externally the building is heavy beyond all precedent.

The nature of the situation requires that the principal entrance should be lateral, as orientation, east and west, is more strongly insisted upon in the Greek Church than even in that of Northern Europe; and, besides this, Alexander in confiding the design to the architect particularly insisted that the three chapels of Catherine's church, which had been consecrated, should be preserved. Nothing therefore could be better than the conception of placing here a noble Corinthian portico, copied almost literally, but with somewhat increased dimensions, from that of the Pantheon at Rome. Having done this, however, it was absurd to place an equally grand portico of sixteen columns on the opposite face, which, from its situation, must always be the back of the church. At all events, if this was done, it was indispensable that

the western front, which is and always must be the principal entrance, should at least have one equally magnificent; instead of this we find only a shallow porch of eight pillars. But the worst feature of the design is that a similar portico is placed at the east end, where there could not possibly be an entrance. This was the more gratuitous, as in order to do this the architect was obliged to remove the apse of the central chapel of the old church, and supply its place by a flat wall with a single window in it: thus not only destroying the effect internally, but at the same time taking away all the meaning of the design, as seen externally. Had he left the apse, and omitted his eastern portico altogether, the design would have been infinitely better; but the right thing to have done would have been to bend his colonnade round the apse, and thus give it a dignity commensurate with the lateral porticoes.

Forgetting for the moment the misapplication of these porticoes, they are by far the finest that have been erected since the time of the Romans. Each of the forty-eight columns which compose them is a single piece of the most beautiful rose-coloured granite, 56 ft. in height, and 6 ft. 6 in. in diameter. Those of the Pantheon at Rome are only 47 ft. 5 in. Of this length, however, 7 ft. is covered by the bronze capital, and 2 ft. 6 in. by a base, also of that metal, which reduces what can be seen of the height of the monolith to 45 ft. 6 in., which is still however considerably in excess of the shaft of the Roman example. The entablature, as indeed the whole building, is faced with marble; and internally the grand porticoes are roofed by a great arch in the centre and a flat roof over the lateral bays. All this is very noble; but the effect of these porticoes is painfully destroyed by an enormous double attic, half the height of the whole Order (71 ft.), placed there to hide the roof of the building, but which dwarfs the columnar ordinance to an extent hardly conceivable. There are many ways in which this could have been avoided. The proper one of course would have been to show the roof honestly, and render it ornamental, than which nothing could have been easier; but even if the attic had been broken into antae, with openings between, so as to look like part of the roof, it would not have destroyed the effect of the porticoes as it now does.

The attic has the further defect of preventing the connection between the dome and the substructure of the church being seen. The dome seems to stand on the roof, or to be thrust through it; whereas, had the roof of the four porches been carried back to its square base, the whole would have been at once constructively intelligible.

The dome itself is very similar externally to that of the Pantheon at Paris, except that in the peristyle considerable confusion arises from there being only twelve great openings behind twenty-four equidistant columns; and, as the windows are wider than the intercolumniations, the effect is not pleasing, especially as again there are twenty-four windows in the attic. But both these domes want the solidity and shadow which are given at St. Paul's by the introduction of the eight masses containing the staircases.

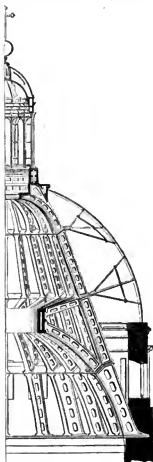
The pillars of the peristyle of the dome of St. Isaac's Church are monoliths of red granite, like those of the porticoes, but only 42 ft. in height, base and capital included, and of a less proportionate diameter.

The whole of the constructive parts of the dome, with the lantern which it supports, are of cast or wrought iron; an expedient that seems perfectly justifiable in such a case, as it is one which, if properly used, might be made as durable as any equally lofty structure wholly of masonry could possibly be. Unfortunately the iron-work here shows as little constructive skill as the other parts of the building, throughout the whole of which there is a quantity of cast and wrought iron tying and bracing employed, which not only confesses that the masses are badly poised in the first instance, but would ensure their destruction if the atmospheric influences should ever reach them.

A good deal of this might have been excusable if the architect had been attempting to erect a building as proportionately light as those of the Gothic age; but as he was using more materials than have ever been employed since the days of the Egyptians, it indicates an unpardonable degree of unskilfulness on his part.

Besides the great dome there are the four eupolini, or bell-towers, which are usually found in Russian churches. These are unobjectionable in design, and are each again adorned with eight monolithic columns, in this case 27 ft. in height. There is still a fourth Order of columns, adorning the four windows that admit light into the interior; but these are only 20 ft. high, including base and capital.

These windows form one of the great mistakes of the design. They are ordinary sash windows, such as are used in Domestic Architecture, and the eye inevitably guesses their width at 4 or 5 ft., their height at 8 or 10; and they form accordingly the scale for the whole church. It requires an immense effort to realise the fact that they are really 10 ft. wide and more than 30 ft. high, and that the little columns on brackets which support their entablatures are really grand monoliths 20 ft. high! Besides this, a building with only four windows,—the three beneath the eastern



253. Half Section of the Dome of St. Isaac's, St. Petersburg.

portico are not supposed to be seen or known,—cannot appear of large dimensions; and the mind inevitably brings it down to the scale of those other structures for which a similar number of openings would suffice.

As remarked above, the same dwarfing effect is produced in St. Peter's by the enormous size of the Order employed, the fewness of the parts, and gigantic character of the sculpture; but in that instance there is a multiplicity of detail and over-crowding of ornament which to a certain extent restores the equilibrium of dimension when the eye becomes familiar with it. St. Isaac's has nothing of the kind, it is only a small church magnified; and if erected on one-third or one-fourth the scale it now occupies, would have been a far more appropriate design. In fact, from whatever point of view it is looked at, it must be admitted that in no building, either ancient or modern, has so much been done to destroy in appearance the really noble proportions which it possesses.

Internally the great nave is 43 ft. in width and 98 ft. high, being made up—first, of an Order 51 ft. high, crowned by an attic measuring 21 ft., and then the vault, which, being a little stilted, makes up 26 ft. The great dome measures only 71 ft., or in diameter internally little more than half that of St. Peter's or the cathedral at Florence; while St. Paul's measures 108 ft., and the Pantheon at Paris 65. But even these dimensions would suffice were it not that the whole floor of the building is so crowded with the masses of construction that there are no cross perspectives of any beauty, or poetry of any sort. It is as rich as malachite and marble combined with sculpture and painting can make it: no expense has been spared; but a little, even a very little taste, or even a little constructive skill, would have been of more value than the whole of this magnificence. So far, indeed, has it been carried, that nothing saves the church from contempt but the grandeur of the materials of which it is composed; or from the charge of vulgarity and bad taste, except the literalness with which its parts are borrowed from Roman examples, and the small number of them which make up the whole design.

It must always be a subject of infinite regret that so noble an enterprise as the erection of this church should have been intrusted to a man so little competent to the task as the Chevalier de Montferrand seems to have been. With so lavish an expenditure and such noble materials placed at his disposal, any man who had carefully studied the works of previous architects ought to have benefited by their experience; and with a little common sense, even without genius, might have produced the most beautiful cathedral in Europe. As it is, a great opportunity has been lost, and, in spite of its splendour, St. Isaac's is at best a grand, but a cold and unsatisfactory failure. Not only is there less poetry, but there is less constructive skill shown in the design of this church than that of any other of the great domical churches of Europe. It is impossible to conceive a building carried out with less thought, or less appreciation of the beauties of the style in which the architect was called upon to design it.

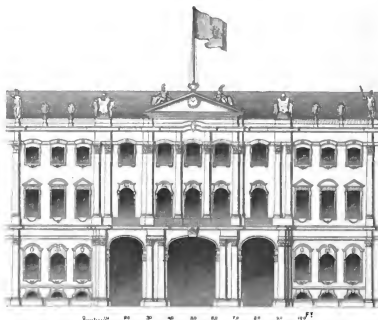
It would be a fair morning's work for an architect of ordinary ability to sketch out the four façades of this great building; and there certainly is not a week's thought in the whole design, from the pavement to the cross on the top of the dome. And he must be a greater genius than the world has yet seen whose passing thoughts are worth one thousandth part of the money that has been spent on them here. At the same time there is scarcely a single constructor of ordinary experience who would not have put together the materials placed at his disposal far more skilfully and economically than has been done by the Chevalier de Montferrand; who, considering the opportunities, can perhaps lay claim to the unenviable distinction of having been the author of the greatest architectural failure in modern times.

II.—SECULAR.

There is no city in Europe which more truly deserves to be called a city of palaces than St. Petersburg—not even excepting Paris: for though that city may be infinitely richer in architectural beauties, the true expression of Paris is more Civic and Domestic than Palatial; while St. Petersburg not only contains some half-dozen of imperial residences, or palaces properly so called, but many of the residences of her grand-dukes and nobles are fairly entitled to that appellation; more than this, all her institutions and public establishments, down even to the barracks of the guards, are designed on a scale of magnificence not found elsewhere; and they are ornamented as only palaces are in other cities. It is true that many—indeed most of these—are only of brick, with ornaments of stucco; and the meanness of material detracts most seriously from the grandeur of effect when looked closely into, but the general result is imposing; while so large a mass of important and ornamental buildings being collected together, gives to the city an air of grandeur not seen elsewhere; and, though the details may be cavilled at, the general effect is unquestionably grand and satisfactory.

The principal palace of St. Petersburg, as well as the oldest,—for the residence of Peter the Great hardly deserves that name—is that known as the Winter Palace, built by the Empress Elizabeth from the designs of Rastrelli, and commenced in the year 1754. The two principal halls—that known as St. George's, and the White Hall—were added by Guarenghi, and the whole of the interior has been remodelled and refitted after the fire in 1837; which seems to have gutted the building, but unfortunately did not damage the outer walls to such an extent as to require their being pulled down, and the whole to be rebuilt from the foundations.

The principal façade, towards the river, measures 731 ft. in length; while the depth of the palace, north and south, is 584 ft., and it is thus considerably larger than the Louvre. Internally it encloses a rectangular court of somewhat broken outline, but generally 385 ft. east and west by 300 ft. north and south; which is less than that of the Louvre, in consequence of the buildings covering a much greater area of ground than in the Parisian example.



254.

Portion of the Façade of the Winter Palace, St. Petersburg.

With these dimensions, in such a situation, and with the amount of ornament lavished upon it, this ought to have been one of the most beautiful palaces of Europe; but the details are so painfully bad, that the effect is entirely thrown away; and a man of taste recoils in horror from such a piece of barbarous magnificence.

The two upper stories are adorned with an Order meant for Corinthian, but so badly drawn and profiled that it may be anything. The architrave is broken into a curve over every window, and the cornice is also treated in the same manner occasionally: over this are pediments,—not connected with the cornice—and the whole is crowned with vases, statues, and rococo ornaments, of various sorts.

The basement has also an Order called Ionic, but, running through only one storey, is smaller of course than the other. Yet the large columns occasionally stand on the heads of the smaller, though occasionally, too, they avoid them in a manner which is almost ludicrous. Add to this that the dressings of the windows are of the most grotesque and gingerbread character, and it may be understood how bad the taste is which pervades this palace.

The palace of Zarco Zelo, about fifteen miles south of St. Petersburg, on the road to Moscow, is another example of the same class. With a façade 858 ft. in extent, and nearly 70 ft. in height, most richly ornamented, it is difficult to understand how it should be so wholly detestable as it is; but with all its pretensions it can hardly be con-

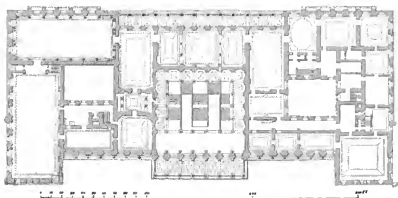
sidered as more than a great barrack, decked out in the tawdry finery of the style of Louis XIV.

The palace of the Hermitage, built by a German of the name of Volekner for Catherine II., as an adjunct to the Winter Palace, certainly avoided most of the defects of its more ambitious neighbour, but rather erred by falling into the opposite extreme of tameness and commonplace. It is now, however, being pulled down to make way for the Palace des Beaux Arts, crected from the designs of Klenze, referred to further on.

The Tauride Palace, crected by Volkoff, apparently in imitation of the Trianon at Versailles, is a great straggling one-storied building, with as little meaning, and without the elegance of its prototype. It is now deserted as an imperial residence; and the palace of Paul I. is turned into an engineer's school, though really deserving a better fate. It is a square building 340 ft. by 378 ft., with an octagonal court in the centre, and great ingenuity is shown in the mode in which the external and internal lines are fitted to one another, giving the internal arrangements a degree of variety so seldom found in the ordinary rectangular palaces of Europe. Some of the rooms, too, are richly and even beautifully adorned; and the architecture of the whole, if not of the highest class, is at least pleasing and reasonable.

Though the Palace of the Archduke Michael cannot rival the Imperial Palace in extent, yet it is by far the most beautiful and elegant structure of its class in St. Petersburg. It was commenced in the year 1820, from designs by the Italian Rossi. By relegating all the offices and domestic buildings to the wings, which cover a greater extent of surface than the main body, the palace acquires a stately and monumental appearance, sometimes seen in a Club or edifice wholly devoted to festal purposes, but seldom found in a residence.

The central block, 364 ft. wide, with a depth of 168, and a height of 87 from the ground to the top of the pediment, is divided practically into two stories: the lower, 22 ft. in height, elegantly and



255. Plan of the Central Block of the Palace of the Grand Duke Michael, St. Petersburg.

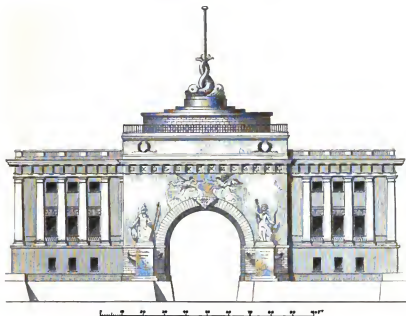


254. Elevation, Garden Front of the Palace of the Grand Duke Michael. Same Scale as Plan.

appropriately rusticated; the upper, ornamented with a very beautiful Corinthian Order, is 42 ft. in height. On the garden front the central colonnade of twelve pillars stands free, as in the *Garde Meuble* of the *Place de la Concorde*, *Paris*; but more beautiful than that, inasmuch as the basement is far better proportioned, and there is only one range of windows under them, while the wings are much more important in the northern example; and the columns in these, being semi-attached, give a solidity to the external parts that supports most effectively and pleasingly the more open design of the centre. Indeed, taken altogether, the *Michaeloffsky Palace* may be considered as one of the most successful designs of its class in modern Europe. It may be a question if too much is not sacrificed to the Order, and whether a more subordinate employment of it would not have produced a better effect; but if employed at all, it is a great triumph to its designer to have used it so correctly and so successfully as he has done here. The internal arrangements of the Palace are on a scale corresponding with the magnificence of the exterior. The entrance-hall, containing the great staircase, is a square apartment, 80 ft. each way, the whole height of the building, and leads to a suite of apartments, not prosaically like one another, but, though varied in form and position, of equal and sustained magnificence.

As before remarked, it is singularly indicative of the purpose which Peter the Great had in view, that the Dockyard should occupy the very centre of the town, standing between the Palace and the Senate House; but still more singular that the talents of a Russian architect should have been able to convert the utilitarian building of an arsenal into an architectural monument worthy of the prominent position this building occupies.

The principal façade of the "Admiralty," as it is improperly termed, measures 1330 ft.; the returns towards the river, 532; and the average height about 60 ft. It would not be easy to propose dimensions which it would be so difficult to treat without monotony, or without inappropriate littleness, as these; but the task has been performed with singular success by *Zueharoff*, the architect employed. The centre of the longer face is occupied by a square block, pierced by the central archway, but without pillars. It is surmounted by a square cupola—if such a term is admissible—crowned by a tall Russian spire reaching a height of 240 ft. On either side of the entrance, for a distance of



257.

Portion of the lateral Façade of the Admiralty, St. Petersburg.

250 ft., the building is only two stories high, and pierced with only eleven windows in each storey, of remarkably bold design. Beyond these are two wings, each composed of three bold Doric porticoes, the central one of twelve, and the two lateral ones of six columns each—the only defect of these being that there are two stories of windows under each of these porticoes; and one cannot help regretting that the pillars were not used where the building was only two stories, and the portion three stories high placed towards the centre, where a comparative weakness would not have been felt.

The returns are similar in composition to the longer face, and equally successful. The whole is so much of a piece, so bold, and so free from littleness or bad taste, that, for a building of its class, it may challenge comparison with anything existing in Europe, or indeed in the world.

On the other side of the Neva, opposite to the "Admiralty," stands the Bourse, which is also a successful design, though not to be compared with the other. It consists of a hall 157 ft. long by 82 ft. wide, lighted from the roof, and from a bold semicircular window at each end. Around this hall are arranged three stories of chambers, devoted to the various purposes of the building. Round the outside is a peristyle of ten columns on the fronts, and fourteen on the flanks, counting those of the angle twice; but they do not reach to the roof, or attempt to hide it; and on the whole, though similar in conception, and designed

by a Frenchman (Thomond), the building is far better and more successful in every respect than the Paris Bourse; standing, as it does, on an angle between two rivers, it makes up, with its accompaniments, a very beautiful architectural group.

By far the greater number of the remaining buildings of St. Petersburg are designed on the same principles as those on which we design Regent's Park Terraces, or Marinas at our seaside watering-places. They almost invariably have a basement storey, rusticated according to certain received patterns, and, above this, two stories of equal dimensions, adorned with a portico in the centre, of six, eight, or twelve pillars, standing on the basement, and running through the two upper stories. On either side of this there is a plain space, broken only by windows, and at each end a portico similar to that in the centre, but having two pillars less in extent. Nothing can be easier than to design buildings according to this recipe, the result of which is undoubtedly imposing and effective at first sight; but no one ever returns to such a building a second time to try and read the thoughts of the architect who designed it, to imbue himself with his principles. No one ever dreams of revisiting these flat and monotonous masses at various periods of the day, or under different atmospheric changes, to study those effects of light and shade which render a truly thoughtful building an ever-varying scene of beauty—one the beholder never can be sure he has wholly seen, and regarding which he is never satisfied that he has mastered all the depths of thought which pervaded the setting of every stone.

Notwithstanding this it cannot be denied that such a building as the *Etat Major* is a noble and imposing pile. It is the joint production of Rossi and Gnarenghi; and has an immense recessed amphitheatrical curve in its middle, in the centre of which is an archway 65 ft. in diameter, and 63 ft. in height. It extends more than 1200 ft., measured along the chord of the arc, and with a height of 76 ft. throughout; while it may be added that, though there is no very great amount of genius, there is also no symptom of vulgarity or bad taste in the design. With such dimensions as these, a building can hardly fail to be a grand and imposing pile; but the merit, such as it is, is due to the sovereign who ordered its erection, and not to the architect who designed it.

The same remarks apply to the *Institution des Demoiselles Nobles* by Guarenghi; that of *Military Orphans*; the *Barracks of the "Chevalier Gardes,"* and of the various corps of Guards and Cadets;—all gigantic piles of brick and stucco, designed with a certain grandeur of conception, but executed with the most commonplace details; and though all contributing to the magnificence of the city they adorn, none of them worthy of commendation as works of Art.

The *Academy of Beaux Arts*, designed by a Russian architect (Kokorin), is a square, 460 ft. by 406 ft., with the usual porticoed façade externally, but possessing internally a circular courtyard of considerable beauty. The *Library*, also by a Russian (Tokoloff), is an elegant building in the style of our Adams; but its most wonderful characteristic is that an edifice 252 ft. long, by 56 ft. wide, can be

made to contain upwards of 400,000 volumes, besides a large collection of manuscripts, reading-rooms, &c. We could not put half that number into one of the same cubic contents.

Of the smaller buildings, perhaps the Medical School by Porta is the most elegant. Nowhere, except in the Archduke Michael's Palace, are the Orders used with such propriety.

The "Riding Houses" are a feature, which, if not peculiar to Russian Architecture, have at least, owing to the peculiarities of the climate, been carried to a greater extent there than anywhere else. The great Riding House at Moscow was long famous all over Europe for the width of the span of its roof, and the mechanical ingenuity shown in its construction. The span of the original roof was to have been 235 ft., but it is very doubtful if it was ever attempted to carry it out, and a less ambitious design was afterwards adopted. Guarenghi's Riding House at St. Petersburg is only 86 ft. span, and is more remarkable for a very beautiful Doric portico of eight columns at one end, and the general purity and elegance of the design of the whole, than for its mechanical ingenuity. That of the 2nd Corps of Cadets, by an architect of the name of Charlemagne, though rather according to the usual receipt, still, from being only one storey in height, is among the most pleasing façades in the capital.

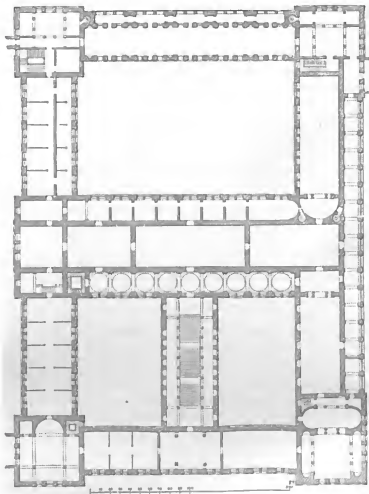
Besides the buildings just enumerated, the Bank, the Foreign Office, and the War Office, each possess some peculiarity of design, or some different arrangement of their pillars, which is more or less effective, but which it is almost impossible to explain without drawings; and none of them certainly are worthy of a place among the illustrations to be selected for such a work as this. They are in fact all of the same type of machine-made designs, displaying a certain amount of taste, and a certain appreciation of the beauties of Classical Art, but never rising to originality, and never displaying that amount of thought indispensable to adapt the ornaments to the essential features of the building to which they are applied; and without which, it need hardly be repeated, success in architectural design is nearly, if not wholly, impossible.

It is rather singular that among all the buildings of St. Petersburg there is not one that can be called "astylar." Everywhere and in every one we find Corinthian, Ionic, or Doric columns, while there is scarcely a single instance where they are wanted, either for the construction or the convenience of the building to which they are attached; while, if in any city in the world their presence could be dispensed with, it is in one situated in such a latitude. In the climate of Russia a bold, plain, massive façade, depending on its breaks for its effect, and on the grouping and dressings of its openings for its ornament, would be infinitely more appropriate; and a bold, deep cornice, in such a northern climate, at all seasons, would be the most artistic as well as the most appropriate termination to a façade.

It is strange that, where a style is so essentially imported and so exotic, no one ever thought of Florence or of Rome; and that Vicenza and Paris should alone have furnished to St. Petersburg models of things which these cities had only obtained at second hand.

REVIVAL.

The new Museum of St. Petersburg is the only important building which has yet been erected in Russia in the new Revival style of Architecture. It is of course by a foreigner, but this time no less a personage than the Baron Leo von Klenze of Munich. It seems that the Emperor Nicholas, in visiting that capital in 1838, was so pleased with what had been done there that he invited the Baron to St. Petersburg, and commissioned him to make designs for the new Palace of the Arts he proposed to substitute for the old Hermitage Galleries of Catherine II.

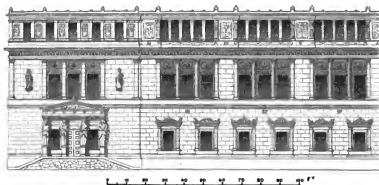


258. Plan of the New Museum at St. Petersburg. From Klenze's 'Description.

The site chosen was one of the finest in the city, on the banks of the Neva, adjoining the Winter Palace on the eastward. The building, which is now completed, measures 480 ft. from the river to the Million Street, and 350 ft. towards the river, divided internally into two courts by the picture gallery that runs across it. One of these courts is partially occupied by the grand staircase, the other is a void. Externally each of the four faces differs somewhat in composition, though all treated with the same care. Where two stories, it reaches 66 ft. in height; where three, it attains 84 ft. to the top of the balustrade or coping. In the centre of the longer faces the apex of the pediment is 98 ft. from the pavement. These dimensions are quite sufficient for architectural effect, and it must be added that the building is wholly free from those falsehoods of design which ruin so many fine structures, especially those of this capital. The basement is plain and solid, the Order confined to the principal storey, and above this is only an attic, ornamented with antae and pilasters. Each storey is complete in itself, and throughout there is that exquisite finish and beauty of detail which characterises Greek Art, and which, within certain limits, the Munich architects have learned to apply with such dexterity. The faults of design arise from the trammels which the architect has thought it necessary to impose upon himself while designing in this style. The first is the painful want of projection in the cornices, and consequent flatness resulting from this defect; especially in a three-storied building, with an Order belonging to one only. Wherever the Greeks used pillars they stood free, and, a shadow being obtained under the roof of the colonnade, a second was not required from the upper member of the entablature; but in modern Domestic Architecture the case is reversed, and if shadow is not obtained from the cornice it is found nowhere. Another equally absurd restriction is that the arch shall on no account be employed, though the Greeks did use arches, and with as much or more beauty than architraves. In this instance the architect was instructed to incorporate in his new building a copy of the Loggie of Raphael at Rome, which formed part of the old Hermitage. To effect this he had recourse to bracketed openings, shown in Woodcut No. 259, which, to say the least, are affected and ungraceful, and their employment here a mere piece of pedantry. The most ornamental façade is—as it should be—that towards the river, where the effect, however, is very much marred by the glazed attic being brought forward to the front, and running without a break over the open Loggie and piers of the storey below. Either it ought to have been set back altogether to the wall behind the Loggie, or the colonnade ought to have been continuous and unbroken. Considering that this is the northern face, where shadow is everything, the best plan of treating it would have been to place a vase or statue over each pillar, and to break the attic back over



259. Pseudo-Arched Window, Museum at St. Petersburg.



260. Elevation of a portion of the River Front, New Museum, St. Petersburg.

each division. It must be confessed the projections would have looked somewhat unmeaning, but that would have been of minor importance; and anything is preferable to a thin glazed attic with five openings over three, with a roof so thin as to puzzle one to find out how it is constructed, and absolutely no projection for shadow.

Internally the picture gallery crossing the court is arranged like that at Munich,—a great gallery in the centre, cabinets for small pictures on one side, and a corridor of communication on the other;—but this has additional meaning from the great staircase leading to it. The picture galleries are continued along the western face, and the whole is arranged, not only with great judgment and artistic effect, but also with regard to convenience.

Great complaints are made of want of light in some of the apartments, and it is easy to see that this must be the case, especially in the basement. This would be otherwise if the building stood in sunny Greece; but it was unpardonable to forget that it was designed for the banks of the Neva.

In spite of these defects, the new Museum is the building of St. Petersburg to which the artist will oftencst recur, and from the study of which he is more likely to improve his taste than from any other in the capital. There is much in its design, in its arrangements, and in its details, which is very beautiful, and one can only regret that a little affectation and pedantry prevented it from being the really satisfactory building it otherwise might so easily have been made.

Besides this attempt to introduce the pure Grecian style on the banks of the Neva, the Russians have lately followed the example of other European nations in attempts to reproduce their Mediaeval style for ecclesiastical purposes. Already one important church has been erected at Kieff, several in Moscow and at Novogorod, one at Neu Georgiesk, and even in St. Petersburg this retrograde movement is rapidly becoming important. The architects have in fact reached that stage to which we had advanced before Pugin taught us the value of



261.

View of the New Russian Church, Paris. From a Photograph.

absolute falsehood ; and, although no one would now be deceived and mistake a modern Muscovite church for an old one, there can be little doubt but that in the course of a few years they will be able to forgo as perfectly as either English or French architects.

It is not, however, only at home that this movement is progressing, but wherever the Russians settle abroad they are proud to declare their

distinctive nationality. Already at Wiesbaden they have built a church with its five bulbous domes and queer pendants over the doorways, so like the real thing that it would hardly catch the eye at Kieff or Moscow.

Recently, too, they have completed a still more ambitious edifice in Paris. When first a glimpse of it is caught from near the Arc de l'Etoile it looks like the extravagant decoration of some Parisian Vauxhall, but when examined close we are not astonished to learn that it has really cost the 52,000*l.* which are said to have been lavished upon it, nor if told that it is, to the Russian mind, a true example of the perfection of Ecclesiastical Architecture. This time the type has not been the usual five-domed church, but rather the exceptional Vasili Blanskenoy at Moscow.¹ As now seen in all the freshness of its staring colours and barbarous form, it looks more like the pagoda of some Indian or Mexican tribe than the place of worship of a civilized people; and if the Russians really wish to impress Western Europe with an idea that they too have progressed like other nations, they would do well to repress their Tartar feelings, and keep their Muscovite forms of Art for the sympathies and admiration of their own people.

Among the minor monuments of the capital the most remarkable is the pedestal of the statue of Peter the Great,—a single block of stone, weighing, it is said, 1500 tons, and which, with very slight aid from the chisel, forms one of the best pedestals for a statue in the world. Its effect is, however, very much lost by being placed in so immense a space as that in which it now stands, and where there are no objects to give a true scale of its size. In a courtyard or smaller piazza of any sort its dimensions would be ten times more effective.

Another monument of the same class is the monolithic column erected to the memory of the Emperor Alexander by his successor. It is the finest monolithic shaft erected in modern times, being rather more than 80 ft. in length, with a diameter of nearly 10 ft. The original length of the block when quarried was 102 ft., but the Chevalier de Montferrand cut off some 20 ft., not because it was either too long or too heavy to raise, but because without this abbreviation its proportions would not have been those of a correct Roman Doric shaft! Worthy of the architect of St. Isaac's! A man with a spark of originality or genius would have made it a polygon, or designed a capital to suit any diameter. There were fifty ways in which the difficulty could have been got over; but this noble monolith was truncated in deference to the proportion of pillars which the Romans had used for totally different purposes.* Such also is the fate of every modern building; and with such fetters as these the genius of modern artists is weighed to the dust.

¹ 'Handbook of Architecture,' Woodcut No. 834.

* Even as it now stands it is said to have cost more than 400,000*l.*; and as it weighs about 400 tons, it cost nearly 1000*l.* per ton.

The raising of the monolith and placing it upright was celebrated as a triumph of modern mechanical skill; it may therefore be mentioned that each of the tubes of the Menai bridge weighed as raised about 2000 tons.

It requires very little knowledge of the history of Architecture in modern times to feel assured that the Russians will never attain to anything great or good in Art by either of the processes by which they have hitherto attempted it. They never will create a style suitable to their wants by employing second-class foreign artists to repeat on the shores of the Neva designs only appropriate to those of the Seine or the Tiber. Still less are they likely to succeed by encouraging native aspirants to reproduce in all its details the style of the Middle Ages, though that no doubt has a certain degree of fitness, and is interesting from its archaeological value. All the examples, however, are on so small a scale as hardly to come within the definition of architectural monuments, and the ornaments applied to them are so rude and so clumsy that not one is worthy of being repeated, still less of being magnified so as to make an old Russian chapel or its details suited to the extended wants of modern times.

There is still, however, one path that seems open to the Russian architects, and which if followed steadily might lead to the most satisfactory results. St. Sophia at Constantinople is practically the parent church of the Russian faith; and the interior of St. Sophia is probably the most beautiful yet erected for the performance of the Christian ritual. With the experience we have since had it could easily be improved, and a third or fourth edition of this church, on either a larger or smaller scale, but carried out with a well-defined aim of producing the best possible interior for a Christian church, might and ought to result in something more perfect and more beautiful than anything of its class the world has yet seen.¹ St. Sophia has another advantage for such a purpose,—it has no external decorative arrangements; and the architect is therefore left in reproducing it to apply whatever he thinks most elegant or most appropriate. It could easily be carried out with five domes externally, or any other more appropriate Russian peculiarity. There is in fact a new field of discovery in this direction that might lead to the happiest results, if the Russians are capable of availing themselves of it. They certainly have been following a totally mistaken path ever since the introduction of the Renaissance styles, with the most unsatisfactory results. It therefore remains for them to show whether this has been only a passing delusion, or whether they are really capable of anything more original or more artistic than has been formed by their works up to the present time.

¹ Even the Turks have done wonders with this model; why should not the Russians be equally successful?

BOOK VIII.—INDIA AND TURKEY.

CHAPTER I.

INDIA.

SECTION I.

THERE is perhaps no circumstance connected with the history of the Renaissance styles of Architecture so remarkable as the universality of their extension, for not only have they conquered and retained possession of Europe for the last three centuries, but they have now attained to undisputed sway on the Bosphorus, have nearly obliterated all the native styles of India, and may eventually extend into China and Japan. In addition to their Eastern conquests, the whole of the New World naturally fell under their sway, for, as there was not in these countries any original style to displace, the European colonists introduced, as a matter of course, the forms of Art they were in the habit of employing in their own homes. So complete, indeed, has this extension been, that, if we except the yet uninfluenced countries of China and Japan, it is not, perhaps, too much to assert, that nine-tenths of the civilized inhabitants of the globe employ those styles of Architecture which were revived in Europe in the fifteenth century, or styles growing out of these, but carried out on the mistaken principles first introduced at that period.

In the previous chapters of this volume the steps have been traced by which Italy, France, Spain, and England were gradually induced to adopt this fashion of Art; it has been shown how it penetrated into Germany, Scandinavia, and Russia; and it has also been attempted to elucidate the causes which led to this strange revolution in the arts of design. It will not be necessary again to allude to these investigations in order to explain the reasons or the mode of its introduction into the East, as these are simple in the extreme, and lie on the surface; the one great cause being the influence of a dominant race, and the natural desire on the part of the subject people to imitate the manners and adopt the arts of the conquering strangers. It is so natural that this should be the case, that it is hardly necessary to insist more fully upon this point. But it requires some knowledge of the unsympathising intolerance which the Spaniards and the Portuguese possess in common with the Anglo-Saxon races, to understand why they should insist on carrying with them wherever they go the habits and customs of other and uncongenial climes; and it is also indispensable to bear in mind how little real sympathy any of these colonizing races had

with Art in any of its forms, in order to appreciate the contempt in which they have always held the arts of the conquered people, and the destruction of all that is beautiful which has followed their footsteps wherever they have gone.

With the knowledge we possess of the tastes of our countrymen, it is no matter of wonder that they should have carried with them their great principle of getting the greatest possible amount of accommodation at the least possible expense—though at first sight it does appear strange, that a people so sensitively alive as the Eastern nations have shown themselves to all the refinements of Art, should at once have abandoned their own to follow our fashions. When, however, we find the surtout-coat and tight-fitting garments of the West in possession of the streets of Constantinople, superseding their own beautiful costume, we ought not to be surprised at the “Orders” being introduced simultaneously: and when native princes in India clothed their armies like caricatures of European infantry, it was impossible that they should escape the architectural contagion also. It may be sad, but it is only too true, that wherever the round hat of the European is seen, there the “Orders” follow eventually, though, for some climates and for some purposes, the one is just as ungraceful and unsuitable as the other.

Had the French ever colonized the East, their artistic instincts might have led to a different result; but as the inartistic races of mankind seem the only people capable of colonization, we must be content with the facts as they stand, and can only record the progress of the flood-tide of bad Art as we find it.

PORTUGUESE.

In the year 1497,¹ the Portuguese, under Vasco de Gama, first passed the Cape of Good Hope, and the following season landed at Calicut, in Malabar. In 1510 Albuquerque besieged and took Goa, and established it as the capital of the Portuguese possessions in India. For more than a century it continued to be the principal seat of their power, and became, in consequence, the most important and most prosperous of the European cities of the East. During this period it was visited and rendered illustrious by the teaching of St. Francis Xavier, one of the noblest and most devoted apostles of the Gospel in the East. It was also during this period of prosperity that those churches and convents were erected which now alone remain to mark the site of the deserted city, and entitle it to notice in a history of Architecture.

Either in consequence of the increased size of the vessels used at the present day, or because of the silting-up of the river in front of the town, the seat of Government was moved more than a century ago to Panjim, lower down the river, and the old capital left in its present state of desolation. It is still, however, the nominal seat of the bishop and the religious capital of Portuguese India, and its churches are still kept in a tolerable state of repair, though the town does not

¹ Five years after the fall of Granada.

possess a single secular habitation beyond the wretched huts of native settlers.

Of the churches, five are of the first class—buildings from 300 to 400 ft. in length, with naves 45 and 50 ft. wide, and with aisles, transepts, and all the accompaniments to be found in Cinquecento cathedrals of important cities in Europe; but, without any exception, they are in a style of Art entirely destructive of any effect they might produce, either from their dimensions or the materials of which they are composed. The Portuguese, it appears, brought no architects with them to India, and the priests, to whom the superintendence of these buildings seems to have been intrusted, were probably better versed in the *Legenda Aurea* than in the works of Vitruvius—at least, their ignorance of the Orders, and of the principles of Classic design, produced the most wonderful effects, and certainly not with a tendency towards either purity or beauty. To this we must add, that the material is the coarse laterite rock on which they stand, and necessarily covered with plaster; all the details have been moulded by native artificers, more ignorant, of course, than their employers; while three centuries of white and yellow wash have long ago obliterated any sharpness or cleverness of execution they may once have possessed. It will be easily understood that, from all these causes combined, a result has been produced as tasteless and as unsatisfactory as can well be conceived.

Perhaps the church in Europe most like those at Goa is that of St. Michael at Munich (Woodcut No. 211). They possess the same vastness and the same air of grandeur, but the same painful jumble of ill-designed details and incongruous parts which mar the effect of that otherwise noble church.

The cloisters attached to these churches are generally more pleasing objects. An arcaded court, in a hot climate, must be very defective in design if it fails altogether in architectural effect; and some of those at Goa are really rich in ornament, being copied from such arcades as those of the Lupiana for instance (Woodcut No. 88); but they too have lost much of their original effect from the repeated coats of whitewash with which they have been covered.

The smaller churches, the Arsenal, and some remains of public buildings now deserted, which still exist in Goa, all show the same total want of artistic treatment which marks the design of the greater churches. By what practically amounts almost to a *reductio ad absurdum*, they prove the difficulty of producing a satisfactory design in this style without a rigid adherence to the original types, or without a knowledge of constructive propriety, and an elegance of taste, which are not to be looked for among the amateur architects of remote colonies.

At Macao, which only fell into the hands of the Portuguese in 1586, they showed even less taste than at Goa. The former city never was so rich or so important as the latter, and never acquired any religious sanctity. Its only really important architectural feature is the façade of the Jesuits' Church. The design for this was evidently procured

from Europe, and is characterized with that exuberant richness of detail which that society have always displayed in their churches; but in this instance the taste of the whole design is better and purer than usual, and the effect is considerably heightened by the whole being executed in granite, with a neatness and precision which only the Chinese are capable of attaining. It is now in ruins, and the sombre grey tint that pervades the whole, combined with the singularity of finding such a façade in such a locality, renders it one of the most pleasing fragments of Church Architecture in the East; and it is the only building in Macao of its class that is worthy of minute notice in an architectural point of view.

At Bombay nothing remains of the Portuguese but the fortifications; nor have any buildings survived at Demann or Calicut which are worthy of notice. From the few specimens of Art with which they have adorned their own country in Europe, this should not excite surprise; on the contrary, the wonder is that they should have done so much as we find at Goa, rather than that they should have done it so badly; and we might have expected to find even fewer buildings in the remote factories which they occupied during the brief period of their dominant career in the East.

SPANIARDS, DUTCH, AND FRENCH.

The Spaniards have done far less, in an architectural sense, at Manila than even the Portuguese at Macao, and, as might be expected, the Dutch have done nothing in their settlements. Their churches, which are few and far between, are of the worst class of meeting-house Architecture, and Batavia does not contain one single civil edifice of any architectural importance.

The French probably would have done better than either of these colonists, if their dominion had lasted longer and been more stable; but they never have been fairly settled in India so as to allow of any real development of their taste. Still, Chandernagore was, or was to have been, adorned with handsome public edifices, which, however, do not now exist; and though Pondicherry is one of the neatest and best laid out cities in India, it has no important public buildings, and, except the citadel (now destroyed), never seems to have had any. Church building was not, of course, a luxury they were likely to indulge in, and, consequently, in none of their settlements are there any ecclesiastical edifices worthy of mention.

The one point in common between these three nations and the Portuguese was, that, in all their settlements, wherever and whatever they built was in the so-called Italian style. All the windows and doors of their buildings have the usual dressing and pediments; and wherever a pillar is introduced, it was copied, or supposed to be, from Vignola, or some Italian text-work. Through their influence, the Orders became so far naturalized that they have been adopted everywhere—as we shall presently see—by the nations in all those countries in which Europeans have settled, to the almost entire supersession of the native styles of Art.

ENGLISH.

Owing to the greater extent of their dominion, and its longer duration, the English have built more in India than all the other European nations together; and probably owing to the late period at which most of their buildings have been executed, it may perhaps be said that they have built better; but till after the first decade of this century their style was the same as that of the other nations mentioned above. About thirty years ago the Anglo-Indians passed through the Grecian-Doric style of Art. During its continuance a Town-hall was erected at Bombay, a Mint at Calcutta, a Palace at Morshedabad, and sundry smaller edifices in various parts of the country. In all these an enormous number of correct Doric pillars, copied from Stuart's 'Athens,' were built up as mere ornaments, and generally so as to obstruct ventilation, without keeping out the heat, and arranged in such a manner as to be as unlike a truly Grecian design as was possible with such correct details.

Since that time the Gothic stage has been attained. It commenced with the Calcutta Cathedral, built in the Strawberry Hill form of Gothic Art, and is now being introduced in churches all over the land; but these last are generally merely correct copies of parish churches in this country, and as such totally unsuited to the climate.

If used with freedom and taste, no style might be better adapted for Indian use than Gothic; but in order to apply it there, the aisles of a church must be placed outside, the tracery must be double and fitted with Venetians, and various changes in arrangement must be made which unfortunately the purist cannot tolerate, and the consequence is, they are worse off for a style of church-building now than before the introduction of the Gothic style.

The fact is, the Anglo-Indians have compressed into fifty years the experience we have spread over two centuries; but they do not show more symptoms of approaching the common-sense stage of Art than has hitherto been apparent in the mother country, though Architecture (especially its domestic form) is so vitally important an element of existence in that climate, that, if they once make the discovery that common sense, guided by taste, is really the foundation of Architectural Art, it is possible that we may again be taught many things, as we have been before, by the tasteful wisdom of the far East.

CALCUTTA.

The Government House at Calcutta is the principal edifice erected by the English in India during the first period indicated above. The idea of the design was copied from Kedleston (Woodcut No. 190), and was a singularly happy one for the purpose. It consists of four detached portions appropriated to the private apartments, and joined by semicircular galleries to the central mass containing the state-rooms of the Palace—an arrangement combining convenience with perfect

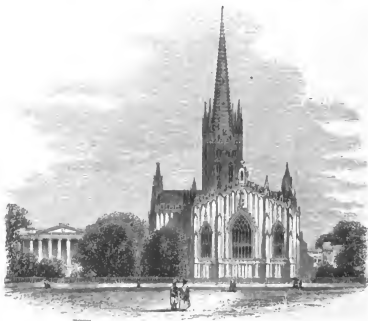
ventilation, and capable of being treated with very considerable architectural effect; all which has been fairly taken advantage of. The principal defect (as it now stands) is that of being too low: but it must be borne in mind that when erected it stood alone, and the tall houses around, which dwarf it now, were all erected since. Its effect is also marred by the solecism of the Order running through two stories, while standing on a low basement. If this might be tolerated in the centre, under the dome, it was inexcusable in the wings, where it throws an air of falsity and straining after effect over what otherwise would be a very truthful design; but, taken altogether, there are few modern palaces of its class either more appropriate in design, or more effective in their architectural arrangement and play of light and shade, than this residence of the Governor-General of India.

The Town-hall, situated near the Government House, is a building imposing from its mass and the simplicity of its outline, but is too commonplace in its design to produce the effect due to its other qualities. It contains two great halls, ranged one over the other, each lighted by a range of side windows; and then, by the usual expedient of a Doric portico in the middle of each front, running through the two stories, tries to look like a grand edifice without any floor in its centre.

Of late years several very important public buildings have been erected in Calcutta, such as the Martinière, the Metcalfe Hall, the Colleges, &c.; but they are all according to the usual recipe of English public buildings—a portico of six or eight columns in the centre running through the two or three stories as the case may be; a lesser one on each end; and a plain curtain with ranges of unadorned windows, connecting the larger with the lesser porticoes. Nothing can well be more unsuited to the climate, or more commonplace in design; but it is the misfortune of Calcutta that her Architecture is done by amateurs—generally military engineers—who have never thought of the subject till called upon to act, and who fancy that a few hours' thought and a couple of days' drawing is sufficient to elaborate an important architectural design. It is scarcely necessary to add any criticism on the result; for nothing either great or good was ever yet produced without far more labour and thought than have been expended on these erections.

The churches in Calcutta are not more satisfactory than the other public buildings, except that the older examples, having no pretensions to being other than they are, please, in consequence, to the extent to which their dimensions and their ornamentation entitle them. They are merely square halls, sometimes with ranges of pillars in their centre to support the roof, where the span is such as to require their introduction, and with pillared porticoes outside to protect their walls and windows from the sun, and they generally have steeples of the form usually adopted in this country in the last century.

The late Bishop Wilson was the first to intimate discontent with this state of things, and he determined, like some of his English brethren, to wipe the stain of Paganism from the Architecture of the



262. Exterior View of the Cathedral at Coimbatore. From Bishop Wilson's 'Life.'

Church. He determined therefore to erect a proper Gothic Cathedral in the metropolitan city. To carry this out, he chose as his architect the late Colonel Forbes, of the Bengal Engineers, a man of infinite talent, but who, like all his brother officers, fancied that Architecture was the simplest and most easily learnt of the Arts, instead of being one of the most difficult, and requiring the longest and most exclusive study.¹ As it was, the Bishop shared his delusion in this respect, and they produced between them a building in a style such as has not been seen in this country since the Peace of Paris.

The Cathedral consists of a large square hall without aisles or

¹ Every one knows the story of the hostess of an evening musical party who, in despair at the absence of her "primo flauto," turned to one of her guests and asked him if he could play on the German flute: to which he replied that, never having tried, he did not know, but had no objection to make the attempt now if they would bring him an instrument. This appears ridiculous, but it is not half so much so as attempting Architecture without long previous training. Any man with a good ear may teach himself music, or, with a special feeling for colour or form, may acquire considerable proficiency in drawing or painting. What is principally required for music, painting, or sculpture, is an innate

æsthetic faculty. The architect must possess this also, but in addition to this he must be a mathematician and a mechanic, he must possess a knowledge of construction and materials, he must know how most conveniently to provide for the purposes of his buildings, and how also to express them most artistically; he must, in short, have all the æsthetic feelings required for the exercise of other arts, but, in addition to this, a great deal more which cannot be acquired by intuition, but must be the result of a life-long study; and, more than this, he must know how to combine the technic with the æsthetic elements of his design without giving undue predominance to either. Is all this easy?



263. Interior View of the Cathedral at Calcutta. From Bishop Wilson's 'Life.'

transepts. The roof is flat (or rather was, for it has been somewhat altered since), and supported by a diagonally-trussed beam, such as we use in railway stations. At one end is a porch called a narthex, but which in fact is a library; and between it and the church a steeple rises through the roof, of very commonplace design.

The only ornament of the exterior is a range of lean buttresses, between which were tall windows filled with wooden tracery of the Perpendicular Order; but these, instead of painted glass, are disfigured with green painted Louvre boards to keep out the sun. We have done strange things in this country, but nothing quite so bad as this. It entirely fails as a Gothic reproduction; for, as we perfectly understand now, a few ill-drawn Gothic details are not in themselves sufficient to entitle a building to be ranked among the revivals of Mediæval Art. The worst feature, however, is that of being entirely unsuited to the climate, having neither verandahs for shade, nor proper windows for ventilation; nor do its arrangements satisfy any of the requirements of the ecclesiologist of the present day.

The Fort Church is a better specimen of the art, but it is only a copy of the Chapel in York Place, Edinburgh, and that is a copy from St. Mary's, Beverley; and though it has deteriorated at each remove, and the details of the Calcutta Church would shock our present critical eyes, it was, at the time it was built, the best thing of its class that had been done in India.

As mentioned above, several station churches have recently been

erected, which might pass for English parish churches when seen at a distance; but no architect has approached the problem of designing a church specially suited to the climate, though the freedom from trammels, and the immense variety of details in Gothic Art, lend themselves most easily to such a purpose in that climate.

In so far as the system of ornamentation is concerned, the Saracenic style is identical with the Gothic: both used pointed arches, clustered piers, vaulted roofs, and they claim other features in common. The most striking and specific difference is that the one uses domes where the other introduces spires; but as in most cases these features are merely external ornaments, there is no reason why the architects in both styles should not adhere to their own peculiar forms, while adopting, when expedient, the principles of the other.

As the Saracenic has been so completely adapted to the climate, there seems no reason why the Gothic should not be so also; but it must be by thinking, not by copying, that this can be effected. Nine-tenths of the mechanical arrangements of our churches were introduced to guard against cold and the roughness of the climate, leaving one-tenth for ventilation or to avoid over-heating. In India exactly the reverse is the case: nine-tenths must be specially designed to protect the congregation from the heat, and very little attention need be paid to the danger of cold or storms. Seeing how perfectly the Saracenic style, which is so nearly identical, has met and conquered these difficulties, the same thing could now be done far more easily with the Gothic; but unfortunately it has not hitherto been looked at from this point of view, consequently none of our churches in India can be considered as even moderately successful. Instead of setting their minds earnestly to the task, the English have been content to carry with them into India the strange creed of their native country, "that Archaeology is Architecture;" and when they have set up an accurate model of some old church which adorns some rural village in the midland counties, they fondly fancy that they have satisfied all that is required of a true architect in designing a Protestant place of worship suited to a tropical climate and the refined exigencies of the nineteenth century.

The most correct Gothic building yet erected in India is the College at Benares, designed by the late Captain Kittoe, who, though not educated as an architect, had more enthusiasm for the art than most men, and had devoted many years of his life to its study in India and elsewhere; he was consequently in a position to do better than most of his brother officers; but he had not sufficient command of the details of the style to adapt them to the new circumstances, and his college is from this cause a failure, both as an artistic design and as a utilitarian building. The result of this is that it has been subsequently so altered that its Gothic character has nearly disappeared, without acquiring those qualities which ought primarily to have guided the architect in his design.

The only really satisfactory buildings which the English have erected in India are the private residences of the civilians and mer-

chants in Bengal. In Bombay these are generally only magnified bungalows, with sloping tiled roofs and wooden verandahs; in Madras they are a little better, but too generally without any architectural pretensions; in Bengal they are seldom without their verandah of pillars in one of the Italian Orders, and with cornices and window-dressing in the same style.

In Calcutta the houses are generally square blocks, at least two, generally three stories in height, always standing alone in what are called compounds, or courts adorned with gardens and surrounded by the domestic offices. Each house is a separate design by itself, and towards the south is always covered by deep verandahs, generally arcaded in the basement with pillars above, which are closed to half their height, from above, by green fixed Venetian blinds. The dimensions of these façades are about those of the best Venetian palaces. The Grimani, for instance, both in dimensions and arrangement, would range perfectly with the ordinary run of Calcutta houses, though, alas! none of them could approach it in design. They also possess, when of three stories, the advantage pointed out in speaking of Italian palaces, of having the third storey of equal height to the lower two.

The consequence of all this is, that, although the pillars are spaced six or even eight or ten diameters apart, and support only wooden architraves, though the whole is only brick covered with stucco, and though the details are generally badly drawn and frequently misapplied, still the effect of the whole is eminently palatial and satisfactory.

In fact, with these dimensions, with their appropriateness, their ornamental detail, and the amount of thought bestowed on each separate design, it would be nearly impossible it should be otherwise. They are in fact nothing but what they pretend to be; and when this is the case it is far more difficult to do wrong than it is to do right, according to the system of design in vogue in this country.

SECTION II.—NATIVE ARCHITECTURE IN INDIA.

It was not to be expected that any artistic fashion could for so long a period be practised by the conquering race without the subject people adopting it in some form or other, and trying to apply it to their own purposes. Unfortunately since the world began it has been the curse of all conquest that the conquered people can neither emulate the virtues nor rise to the level of their masters, while they are prone to ape their fashions, and, in copying, to exaggerate their vices.

India has been no exception to this rule; and it would be difficult, in modern times at least, to find anything much more contemptible than the tawdry imitations of a European Court which we ourselves set up at Lucknow, coupled as it was with a sensuality and corruption which can only exist under an Asiatic sun. Although it was here that the Eastern form of the Italian Renaissance bloomed in all its absurdities, it was not here that it first took root. Our empire and

our influence commenced in the Carnatic, long before it practically extended to Bengal; and it is at Tanjore, Trichinopoly, and the other cities of the south, that the natives first tried what they could do in the styles of Alberti and Michael Angelo.

One of the most remarkable examples of this is to be found at Tanjore. As you approach the town you see two great pagodas towering over all the rest, nearly equal in dimensions, and not unlike each other in form. The one is the grand old temple represented in Woodcut No. 58 in the 'Handbook of Architecture;' the other, on a nearer examination, is found to be made up of Italian balusters, some attenuated, some stumpy, intermixed with pillars and pilasters of the most hideous shapes, but all meant for Italian, and mixed up with Hindoo gods and goddesses, and little scraps of native Architecture peeping out here and there, so as to make up a whole so inexpressibly ludicrous and bad, that one hardly knows whether to laugh or be angry. At first sight it appears difficult to understand what state of affairs could have brought about such a combination as this; but if any one wanted to understand thoroughly the state of the native mind at the time this pagoda was erected he could nowhere find a better illustration. There is here that persistent adherence to their ancient forms and feelings in all essentials which characterizes everything native, merely varnished over with a tawdry film of European civilization which they neither feel nor understand.

What was done at Tanjore only faintly foreshadowed what took place at Lucknow. Our power was too early established in the south, and the destruction of the native dynasties too complete, to allow of any great development of any sort in their dependent state. The most powerful of southern native princes, the so-called Nawab of the Carnatic, was brought into Madras itself, where he erected a huge formless pile, in which he and his descendants now live, but without the means of indulging in any architectural vagaries.

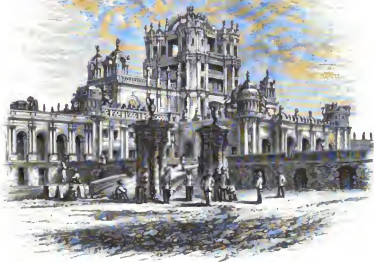
The kingdom of Oude was one of our next creations. From the importance of their relative position its sovereigns were from the earliest date protected by us, which means that they were relieved, if not from all the cares, at least from all the responsibilities of government; and, with the indolence natural to the Indian character, and the temptations incident to an Eastern Court, left to spend in debauchery and corruption the enormous revenues placed at their disposal. The result might easily have been foreseen. Things went on from bad to worse, till the nuisance became intolerable, and was summarily put an end to by the daring injustice of Lord Dalhousie's policy.

One of the earliest buildings of importance at Lucknow in the Italian style is the Mansion of Constantia,¹ built by General Martin² as a residence for himself.

¹ So called apparently from the motto "Labore et Constantia," adopted by the General, and written up in front of his house.

² General Martin was born at Lyons in

1732, and died at Lucknow 1800. He commenced his career as a private soldier in the French army; but, in consequence of Lally's severity, deserted at the siege of Pondicherry,



264.

View of the Martinière, Lucknow. From a Photograph.

The General was apparently his own architect, and has produced a design somewhat fantastic in arrangement, which sins against most of the rules of pure Palladian Art to an extent that would not be pardonable except in such a climate and under the peculiar circumstances in which it was erected. Notwithstanding this there is something very striking in the great central tower, rising from a succession of terraced roofs one over the other, and under which are a series of halls grouped internally so as to produce the most pleasing effects, while their arrangement was at the same time that most suitable to the climate. The sky-line is everywhere broken by little kiosks, not perhaps in the best taste, but pleasing from their situation, and appropriate in the vicinity of a town so full of such ornaments as the city in whose proximity it is situated. Taken altogether it is a far more reasonable edifice than the contemporary capriccio of Beekford at Font-hill; and if its details had been purer, and some of those solecisms avoided which an amateur architect is sure to fall into, it really does contain the germ of a very beautiful design.

The founder of the mansion lies beneath in a dimly lighted, vaulted chamber in the basement of the great tower. His tomb is a simple

and joined the English service, in which he rose to the rank of General. He left the greater part of his immense fortune to found educational establishments at Lyons, Calcutta,

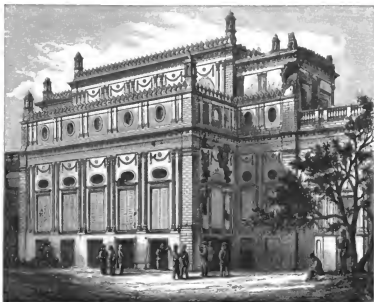
and Lucknow; but, owing to the length of his will, and his having drawn it up himself in bad English, the principal part of his money has been wasted in law expenses.

plain sarcophagus, standing on the floor, and at each angle a grenadier in full uniform stands with arms reversed in an attitude of grief, as if mourning over the fall of his master. The execution of the monument, like everything about the place, is bad, but the conception is the finest that has yet been hit upon for a soldier's grave.

This mansion is now fast falling to ruins, and a building of brick stuccoed is by no means a pleasing object in decay, but when new it must have been very striking. At all events its effect on the Oude sovereigns was most remarkable. For although their tombs, their mosques, and imambarahs were still erected in the debased Saracenic style then prevalent, all the palaces of Lucknow were henceforth erected in this pseudo-Italian style. The Fumrah Buksh, the Chutter Munsil, and numerous other buildings, display all the quaint picturesque irregularity of the age of Francis I., combined with more strange details than are to be found in the buildings of Henri IV. These were far surpassed in grotesqueness by the Kaiser Bagh, the residence of the late king. This consisted of a great square of buildings surrounding an immense courtyard: the whole palace being in extent and arrangement by no means unlike the Louvre and Tuileries as joined together by the present Emperor. But instead of the beautiful stone of Paris all was brick and plaster; and instead of the appropriate details of that palace, the buildings surrounding the great court at Lucknow are generally two stories in height and singularly various in design, generally with pilasters of the most attenuated forms running through both stories, between which Italian windows with Venetian blinds alternate with Saracenic arcades, or openings of no style whatever. These are surmounted by Saracenic battlements, and crowned by domes such as Rome or Italy never saw, and the whole painted with colours as crude as they are glaring. Inside there are several large and handsome halls, but all in the same bad taste as the exterior, and adorned with mirrors and furniture of the most costly description, but generally placed where they are not wanted, or where their presence has no meaning.

A detached building called the Begum Kotie is a better specimen of the style than anything perhaps in the Kaiser Bagh itself, but it cannot either be called a favourable specimen of Italian Art, or a successful adaptation of the style to Oriental purposes, though it has a certain amount of picturesqueness which to some extent redeems its other defects. Like all the other specimens of Oriental Italian Architecture, it offends painfully, though less than most others, from the misapplication of the details of the Classical Orders. Of course no native of India can well understand either the origin or motive of the various parts of our Orders—why the entablature should be divided in architrave, frieze, and cornice—why the pillars should be a certain number of diameters in height, and so on. It is in fact like a man trying to copy an inscription in a language he does not understand, and of which he does not even know the alphabet. With the most correct eye and the greatest pains he cannot do it accurately. In India, besides this ignorance of the grammar of the art, the natives cannot help feeling that the projection of the cornices is too small if meant to pro-

duce a shadow, and too deep to be of easy construction in plaster in a climate subject to monsoons. They feel that brick pillars ought to be thicker than the Italian Orders generally are, and that wooden architraves are the worst possible mode of construction in a climate where wood decays so rapidly, even if spared by the white ants. The consequence is, that, between his ignorance of the principles of Classic Art on the one hand, and his knowledge of what is suited to his wants and his climate on the other, he makes a sad jumble of the Orders. But fashion supplies the Indian with those incentives to copying which we derive from association or education, and in the vain attempt to imitate his superiors he has abandoned his own beautiful art to produce the strange jumble of vulgarity and bad taste we find at Lucknow and elsewhere.



265.

Begum Kotie, Lucknow. From a Photograph.

The great caravanserais which the Calcutta baboos and the native rajahs have erected for their residences in Lower Bengal are generally in this style, but with an additional taint of vulgarity. But perhaps the most striking example of it all is a pavilion which was erected within the palace at Delhi by the late king. It stands behind, and is seen above, the great audience hall of Shah Jehan, in which once stood the celebrated peacock throne, and is one of the noblest and most beautiful apartments of its class in any palace in the world. Over this, on entering the palace, you now see a little pavilion of brick and plaster, which its builder assumed to be the Doric Order, with Italian windows and Venetian blinds. The building is painted green,

the frieze red, and the ornaments yellow!—the whole in worse taste than the summer-house of a Dutch skipper as seen overhanging a canal in Holland. Contrasted with the simplicity and the elegance of the white marble palace beneath, it tells, in a language not to be mistaken, how deeply fallen and how contemptible were the late occupants of the throne, as compared with their great ancestors of the House of Timour, who ruled that mighty empire with wisdom, and adorned its cities with those faultless edifices described in a previous part of this work.

We live so completely among the specimens of the art of Architecture which are found in this country, and our associations or our prejudices are so bound up with our admiration for, or our feelings against them, that it is extremely difficult for us to get outside and take a calm survey of the whole, so as to read all the lessons that might be learned from their study. But if any one wished to feel assured how perfectly Architecture is a reflex of the national character and taste, there is perhaps no place where he would see this more clearly and distinctly than in studying the history of Architecture in Hindostan during the last six centuries.

Nothing can be grander and more severe, and, at the same time, more chastely ornate, than the buildings erected by the stern old Patans in the early centuries of the conquest; nothing more elegant, or in Architecture more poetic, than the palaces, the tombs, and mosques erected by the Mogul sovereigns during the period of their prosperity; and nothing could be better calculated to display at the time, and to hand down to posterity, a clear impression of their wealth, their magnificence, and the refinement of their taste.

Nothing, on the other hand, could more clearly show the utter degradation to which subjection to a foreign power has depressed their successors than the examples of the bastard style just quoted. When we reflect how completely the best educated and the most artistic classes in the reign of Queen Anne learned to despise the Gothic style of our forefathers, the taste for which has returned, and we now admire so intensely, we ought not to be surprised if the natives of India should have been influenced in the same manner, though from different causes. But it does seem astonishing, that while the Hindoos were erecting temples and ghauts, if not so grand, at least as elegant, as of yore—while the very kings of Ond were erecting such buildings as the Grand Imambarrah, or the Ronni Durwaza—they should, at the same time, fancy they saw beauty in such abominations as they were perpetrating under the guise of Italian Art. Is it that the demon of fashion can always blind our better judgment, and force us to admire any monstrosity that is in vogue at the moment, in spite of all that our better taste or innate feeling of what is right may point out to us as either really correct or beautiful?

CHAPTER II.

TURKEY.

STRICTLY speaking, the history of the Renaissance Architecture in Turkey, or, more properly, in Constantinople, ought to be treated as commencing nearly contemporaneously with its rise in Italy, inasmuch as after the death of Mahomet II., in 1480, the Turks abandoned their own original style of mosque-building, to copy the Byzantine forms of the city they had just obtained possession of; and so enamoured did they become with the new form, that they have never reverted to the usual or orthodox plan of a mosque in the capital, though, in the provinces, the true Saracenic style has always prevailed, with only a very slight admixture of the Byzantine element.

There is, however, this very material and important distinction between the practice of the architects of the Western and Eastern capitals of the old Roman Empire. At Rome, the Renaissance architects retained the old form of the Mediaeval Church, but carried it out with Classical details: at Constantinople, the Turks adopted, in their mosques, the forms of the Byzantine Church, which were new to them, but carried out their designs with their own beautiful and appropriate details. The former was a stupid and unnecessary process, brought about—as pointed out above—by circumstances wholly irrespective of, and foreign to, the art of Architecture. The latter is a reasonable and proper course to pursue, which, honestly persevered in, can only lead to the most satisfactory results.

Nothing can be wiser or more expedient than that a foreign nation settling in a new country should adopt such forms and arrangements of buildings as have been found most suitable to the climate and to the constructive necessities of the place; but it by no means follows from this that they are also to copy the details, and to debar themselves from introducing every improvement their taste or their own experience may suggest.

When the Turks conquered Constantinople, they soon found that the climate was not suited to the open courts for mosques which were so appropriate at Cairo or at Delhi; and, having before them such noble buildings as the Church of St. Sophia, and other domical churches of the great age of Byzantine Art, they at once adopted the form, and set about building mosques on that plan, but improving, in so far as they could, not only the arrangement and construction, but employing everywhere their own Saracenic details, and adapting each of them to the place it was to occupy, and the constructive necessities it was to fulfil or to represent.

Strictly speaking, the arrangement of the plan and the construction of a building belongs to the engineering branch of the profession. The harmonious adjustment of its proportions, and the appropriate ornamentation of these parts, fall specially within the province of the Architect. All that the Turks did was to borrow the mechanical part of their mosques from their Byzantine predecessors; but they were neither so lazy nor so illogical as to think that their doing so excused them from the necessity of thought, or that mere reproduction can either be, or can ever represent, contemporary Art.

The practical result of these two different systems is what might easily be foreseen. At Rome we have St. Peter's—a Gothic church carried out in Classical details: though in dimensions it is as large as any three Mediæval cathedrals put together, though, constructively, it is superior to any, and though in richness of detail and ornamentation it surpasses them all, yet, in the effect it produces, and in artistic merit generally, it is inferior to the smallest and plainest of Mediæval churches.

At Constantinople, on the contrary, we have, in the contemporary Solimanie Mosque, a building which, though the first attempt of a new people in an unfamiliar style, is beautiful in itself, and satisfactory as a whole. In the Mosque of Aehmet, we have an interior as superior to all those of the contemporary churches of the Palladian school as it is possible to conceive; and this result was obtained by a set of ignorant Turks, aided by a few renegade Levantines, competing with the best intellects and the most educated classes of Western Europe, at the time of their highest artistic development!

But the Westerns were following out a wrong system, in which success was impossible. The Easterns were correct in their principles of Art, and failure was consequently very difficult to be achieved.

In so far, therefore, as the form is concerned, the Constantinopolitan Renaissance arose contemporaneously with the Italian, and might be so treated in a history of Art. If, however, the essence only is considered, it dates only from within the limits of the present century. Though either classification might consequently be adopted, the latter is the relation in which it will be convenient to treat of it on the present occasion.

Since the beginning of the present century, Turkish Architecture may be said to have fairly passed out of this stage of quasi-Renaissance, or true Art, which distinguished it for the previous three centuries, and to have assumed the true Renaissance, in all its illogical and unthinking unreasonableness.

The round hats of the Franks have invaded the Bosphorus, and with them have come their mistaken principles of Art. To the Byzantine form of their mosques the Turks have now added the details of the Italian Orders; but as yet not ungracefully, partly because Roman details are not wholly incongruous with Byzantine forms, and because, in the mosques at least, it is only the details, not the forms, that they have altered. It has not yet occurred to them to try and make one of



266.

Mosque of Selim, Scutari. From a Drawing by T. Allona.

their religious edifices look like a Roman Basilica, or a Greek Temple, or anything, in fact, but what it is, and thus far, therefore, the injury is only partial.

In the mosque, for instance, that the Sultan Mahomed II. (1808-1838) erected at Tophana, the outline is that of all the older buildings, and it is only on a close or critical inspection that we discover the clumsy consoles and badly-profiled cornices with which it is covered.

That of his predecessor Selim at Scutari is a more pleasing specimen; and though all the details are really Italian, they are used with such freedom, and so little obtrusive, that their introduction may almost be forgiven. Were it not for the exceeding beauty of the older mosques, we should not hesitate to admire this specimen of the art; and it is also easy to see that a little more familiarity with the best class of Italian details would have remedied many of the defects of these designs. The only question being, Is freedom possible with such familiarity? all that can now be answered is, that, so far as experience goes, knowledge and slavery in Architectural Art seem synonymous terms.

The great mosque which Mahomet Ali erected in the Citadel at Cairo is a still more remarkable example of the decline of architectural taste in the East. Its dimensions are very considerable, as it consists of a square block of building measuring 157 ft. each way; and, with the attached courtyard surrounded by arcades, the whole measures 365 ft. by 186. Its plan, too, is unexceptionable, being a square hall surmounted by a dome 60 ft. in diameter internally, and four semi-domes



267.

Mosque in Citadel at Cairo. From a Photograph by F. Bedford.

of pure Constantinopolitan type.¹ In addition to these advantages, its materials are richer than any used for a similar purpose in any mosque in modern times, the walls internally being all covered with slabs of Oriental alabaster of the most beautiful tints; and it was intended to have carried the same class of ornamentation all over the exterior, but the mosque was left unfinished at the death of its founder in 1842.²

Notwithstanding all these advantages, the building must be pronounced a failure in an architectural point of view, for the same reason that the church at Mousta fails, as also the cathedrals of Beulogne and Gran—because of the want of knowledge of the principles of design on the part of their architects, and because their details neither express the construction nor are elegant in themselves. Externally the mosque itself is pierced with two stories of plain unornamented windows, which, without any grouping, certainly do not indicate the interior. The arches of the vaults are not brought through to the outside, as is the case invariably at Constantinople; the roof is so flat and so plain that the group of domes and semi-domes that crown it lose half the value, as far as size is concerned, and all the poetry they might possess, if

¹ It is in fact a reproduction on a somewhat smaller scale of the Mosque of Achmet at Constantinople ('Handbook of Architecture,' Woodcut No. 364).

² I am indebted for the dimensions here

given to a plan of the building kindly procured for me by the Rev. Geo. Washington, chaplain at Cairo, but which arrived too late to be engraved.

growing naturally out of the construction below. Add to this that the details are in a bad, ill-understood Corinthian style, mingled with Pointed arches and Rococo ornaments of all sorts, it will be easy to understand how even the noblest design may have been destroyed.

The real difference, however, between this mosque in the Citadel and the older mosques in the city of Cairo below, does not exist in either the dimensions or the original conception of the building so much as in the mode of carrying it into effect. In the olden time the Architect would merely have arranged his building, probably very much as this one is laid out, and would have provided that the construction should be truthful and truthfully expressed both inside and out. All the moulding, with the capitals, brackets, &c., would have been built in block, and, as the structure progressed, one block would have been handed over to one carver to be completed, another to another. He would then have employed the inlayer on one part, the painter on another, and the gilder where his services might be required; and all these men working together, each a master in his own department, would have produced that multiplicity combined with unity we so much admire in the old buildings. The misfortune is, this class of artist does not now exist in Cairo; and the architect must put into his design as much thought as he has time for, or is capable of exerting, before he begins it. As he first conceives it, so it is erected, and when the crescent is put on the top of the dome the whole is considered complete. Surely we ought not, under these circumstances, to be surprised at the cold and unsatisfactory result that is produced by this process in this instance.¹ Yet it probably pleases those that worship in it as much, if not more than the older buildings, which excite such admiration in our eyes; but it can only do so in consequence of its size and the richness of its materials; and there is no surer sign of the decay of taste, or of a want of knowledge of the principles of Art, on the part of any people, than the assumption that these two qualities can ever be of any value except as mere vehicles for the expression of the higher qualities of taste and design which can alone make a work of Art valuable.

PALACES.

Although, from the same strong conservative feeling connected with religious buildings, the mosques of the Turks have hitherto, like those of Lucknow and Delhi, escaped from the lowest stage of the copying school, the same assertion cannot be made with regard to their palaces. The Ambassadors of the Western Powers have erected for themselves palaces at Pera in styles peculiar to the various countries which they represent; and the Sultans of Turkey have learnt to admire these, as

¹ On the right of the drawing is a cast-iron clock-tower, which must, with the machinery, have been ordered from some firm in Birmingham, as the mouldings and decorations are all in that class of Gothic which we find adorning steam-engines and water-tanks

in our manufacturing towns. As it is very offensive in its native land, it will be understood how much more so it is in this situation; but even then it is questionable whether it is in worse taste than the alabaster fountain occupying the centre of the court of the mosque.



269.

Palace on the Bosphorus. From a Drawing by T. Allom.

they have been taught to believe in every form of the civilization of Western Europe, and, more than this, have employed the architects deputed to build the ambassadorial residences to erect palaces for themselves.

The annexed view of one of the Sultan's New Palaces on the Bosphorus is a fair average specimen of the productions of this new school. Instead of the old plan of designing every part with reference to the purpose to which it was to be applied, of making every window and pillar tell its own tale, and of carving every detail with reference to the situation and the light in which it was to be placed, we have here a design which any clever draftsman could complete in all essentials between sunrise and sunset, and which, when finished, would be as suitable for the climate or the purposes of St. Petersburg or Washington as for a palace of a Turkish Sultan on the shores of the Bosphorus! Though there is no vulgarity and no gross architectural solecism in the design, it would be difficult to see how the art could well sink lower than the stage here represented.

Another palace in Constantinople, which was in progress of erection by the late Sultan Abdul Medjid at the time of his death from the designs of a young Armenian artist named Balzan, is in some respects better than the last mentioned, in others worse. As will be seen from the view, it is rich in detail and full of design to an extent rarely found in modern buildings of the Classical school. It is more like a design in the Plateresque style of the Spanish architects of the 16th century than anything that has been done since that time, and if the details were good in themselves, or appropriate, the effect would be all that could be



269 View of the Sultan's New Palace at Constantinople. From a Photograph.

desired; but it was a mistake in the artist to adopt so much that was Classical, and mix it with so much opposed to all the principles of that style.

Although the second example has not the customhouse-like coldness of the first design, it is almost equally a failure, though from very different causes. The first shows no evidence of thought, and has hardly a sufficiency of ornament for its situation or its purposes. The second has an almost superfluity of ornament, and also evinces a considerable amount of design. It fails, however, in producing the desired effect, because the principal part of the details are borrowed from a foreign Classical style, and are used for purposes for which they were not originally intended; and the parts which are added are such as neither accord with the original intention of the Orders, nor with anything suggested by the building itself.

The whole of the details are in fact evidently added for ornament's sake, without any real reference to the constructive exigencies of the

building, nor in order to adapt the foreign elements to the necessities of the climate in which they are employed, neither have they any particular reference to the manners or customs of the Sublime Porte. They halt between all these; and the puzzled architect has only exhibited the confusion of his own brain, while he had at his disposal money, materials, and means to produce as rich and as beautiful a building as any in Europe.

There is far too little vitality left in the Turks or in the Turkish Empire to hope that, in Europe at least, they can ever rise again to such a degree of power as to be able to shake off this state of dependence on the arts and influences of the West. They have not yet sunk so low as the wretched Nawaubs of Oude, and their Architecture is still better than that of Lucknow; but they are daily entering more and more into the position of a protected state, and protection is only another word for degradation that sooner or later must lead to extinction.

In Europe the Turks have been too mixed a people, too little at home, and too insecure in their possessions, to have ever done much for Art, notwithstanding the instincts of their race, and their expulsion would now be no loss in this respect; but it is by no means clear whether the modern Greeks, who are practically Slaves, but seem destined to succeed them, would do better. Up to this moment the Greeks of the Levant have not shown the smallest aptitude for Art in any of its forms; and although with more leisure and better opportunities there may be a prospect of improvement, even this seems very doubtful.

BOOK IX.—AMERICA.

THE steps by which the Classic styles were introduced into America by the Spaniards were identical with those which led the Portuguese to adopt it as their style of Architecture in the East, and the results were practically the same in both countries.

Religious enthusiasm was at its height in Spain at the time when the New World was discovered by Columbus; and the enormous wealth acquired by the conquest of Mexico and Peru, whether resulting from plunder or from the successful working of the mines, naturally led so priest-favouring a people to dedicate a considerable portion of their newly-acquired wealth to religious purposes. The consequence was that very soon every city built its cathedral, every town its churches, and every hacienda its chapel; but it is, perhaps, not unjust to say that not one of them was in any degree remarkable for beauty of architectural design.

It has already been pointed out how inartistic the Spaniards had shown themselves in dealing with the Renaissance styles in their own country, notwithstanding the assistance they obtained from the artists of Italy and France, and it could hardly be expected that they would do even as well in the New World. The priests, who, in nine cases out of ten, were the architects there, had none of them received the necessary professional education. They had a certain recollection of what was done in their own country, and may have possessed imperfect drawings of the more celebrated churches of their day. But to adapt these to altered circumstances, and to carry them out in detail with native—or at least with local—artists, was as difficult (if not more so) as to make a new design. The consequence is that most of the churches of New Spain, though many are remarkable for their size and splendour, are singularly plain in an architectural point of view; or, what is worse, vulgar and pretentious from an affectation of Classical Art, either misunderstood or misapplied.

The largest and finest of all the churches erected in the New World is perhaps the cathedral of Mexico. It was commenced in the year 1573, in substitution of an older church which had been erected by Fernan Cortes, on the site of the great temple of Montezuma, but was not finished till the year 1657. Its dimensions are very considerable, inasmuch as it is said to measure 504 ft. over all externally from north to south, and 228 ft. across. It has five aisles, and the intersection of the nave and transepts is crowned by an octagonal lantern, but only of the same width as the central aisle. As it is understood that the designs for this church were sent out from Europe, it avoids many of the faults which are so offensive in some of the other churches of this

city. Indeed, the architectural arrangement of the interior may be called singularly happy for this class of building. The entablature, which always formed the great stumblingblock of architects in this style, is altogether omitted; and the arches spring direct from the capitals of the Doric half-columns, which are attached to the piers. It thus avoids most of the faults of our St. Paul's, and even the size of the dome is internally in better proportion to the rest of the church, where there is a chancel beyond. If the dome ends the vista it may be of any size, but in the middle of a cruciform church it throws every other part out of proportion if its dimensions are not kept moderate.

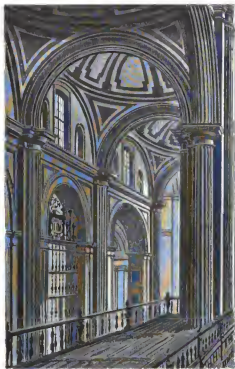


270. External View of the Cathedral at Mexico. From Pedro Gualdi, 'Monumentos de Mejico.'

Externally the western façade is massive and imposing, perhaps more so than any Spanish church of the ago and style. Its two great towers rising to a height of 305 ft. are really grand features, solid below, and tapering pleasingly above. The central dome, it must be confessed, looks mean externally compared with those found in Italian and French churches; but the Spaniards—except at the Escorial—do not seem ever to have affected this feature.

When we look at the immense difficulties in the internal arrangement which the introduction of a tall Italian dome superinduces, it becomes a

question whether it really is a legitimate part of such a design; but it is so noble that a good deal can be forgiven for its sake. The external outline of the cathedral of Mexico is—barring its details—perhaps, one of the best proportioned examples of a church designed to dispense with this feature; though it can hardly be doubted but that externally the loss of effect is considerable from this cause. Even if it must be admitted that the adaptation of the tall dome to the internal arrangement of a modern church has not been quite successfully accomplished hitherto, there seems little doubt but that with the engineering talent of the present day that difficulty also might be overcome; and that a



271.

View of side Aisle in the Cathedral at Mexico. From Guadli.

great dome might be fitted to a nave, at least as wide as two-thirds of its diameter, without any offensive display of mechanical expedients. If this were done with judgment and taste, we should probably have an architectural effect such as has not yet been seen; but it is not to the New World we must look for anything so artistic or so desirable.

As at Goa, some of the cloisters attached to the great monastic establishments of Mexico and elsewhere are more pleasing specimens of Architectural Art than the churches to which they belong. One in particular, attached to the Convent of N^{ra} S^a de la Merced, is as

bright and as beautiful as that of Lupiana (Woodcut No. 88), or anything in Spain. It possesses that happy arrangement of two smaller arcades over one wider arch below, as in the Doge's Palace at Venice; except that in this instance nothing has been put over them, and as the whole detail is rich and elaborate, the effect is extremely pleasing.

There are no public buildings in the city of Mexico remarkable as Architectural designs. Many are large and highly ornamented, but they are only bad copies of buildings at home, having no local peculiarity to distinguish them from those of the mother country, except what is universal in colonial design—that clumsiness in executing the various details and profiling the Classical moulding, which so shocks any one who has imbued himself with the beauty of Classical Art in this respect.

PERU.

The cathedral of Arequipa, in Peru, is probably as good an example as could well be chosen to illustrate the position of the art of Architecture in the emancipated colonies of Spain at the present day. The original cathedral was commenced in the year 1621, from the designs of an architect named Andrea Espinosa, and was completed in 1656. This building was, however, almost entirely destroyed by fire on the 1st of December, 1844, shortly after which time the rebuilding was commenced, on the same plan and general outline as the former edifice, but with such improvements in detail as the progress in the knowledge of Architectural design seemed to suggest.¹

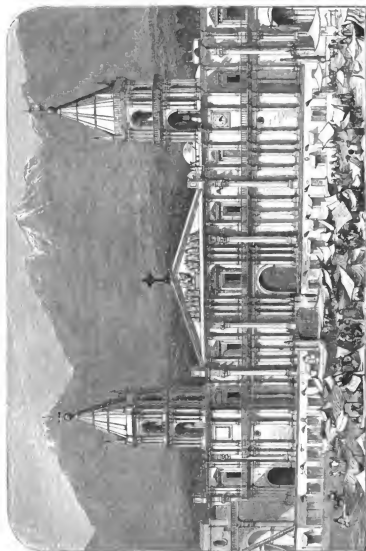
As will be seen from the woodcut, the façade is of very considerable extent, and divided into five compartments by Corinthian pillars standing upon a low basement, but supporting only a fragment of an entablature. Between these are two ranges of pillars standing one upon the other, of the same Order, but of course only half the height; and it is their cornice—not that of the larger Order—that crowns the building. This is perhaps the only important instance known of this curious inversion of the European principle of design, and it is so nearly successful that a very little more would have made it quite so. If the larger Corinthian Order had only been used as square piers or buttresses, marking the division of the interior, their use would have been understood and their effect most pleasing. A very monumental effect is also obtained by the lower storey being pierced only by the entrances, and the upper by a few well-proportioned windows widely spaced. The towers are perhaps a little too low, but their form was probably the only one that ought to be adopted in a country so subject to earthquakes, and, even as it is, they are well proportioned to the length of the façade to which they are attached, and their design is pleasing and free from any instance of bad taste.

The features that principally detract from the beauty of this

¹ For this information and for the woodcut I am indebted to the kindness of Mr. Markham,

author of a work on Peru, and the introducer of bark into India.

façade arise from the peculiarity so often remarked upon in the previous pages, of men undertaking to design in a style with all the details of which they are not practically familiar. At Mounsta, at



Arequipa Cathedral. From Markham's 'Peru.'

212.

Boulogne, at Goa or Calcutta, where buildings are erected by persons who have not mastered the details of the style, they commit the same faults that a man would make who would attempt to write a poem in Latin without knowing more than the mere rudiments of the language.

However grand and good their conceptions may be, they are marred by the defective mode in which they are expressed, and so it always will be till men learn to build as they write—in the vernacular.

NORTH AMERICA.

When we turn from what was done in Mexico and Peru to examine the Architectural forms of the United States of North America, we become instantly aware of the enormous difference of race and religion that prevails between the two great sections of that continent.

The old Scandinavian or Dutch settlers built their meeting-houses for prayer, or their neat quaint dwellings, in utter ignorance of the precepts of Palladio, and with the same supreme contempt for Mediæval Art as prevailed in Europe for three centuries after it ceased to be practised; and the Puritan Pilgrim Fathers, who followed and superseded them, showed the same Anglo-Saxon indifference to Architectural ornament as has characterized their race at all times, except when their natural vanity is piqued into rivalry with some other nation of more artistic tendencies. The consequence of this was, that from the time of the earliest colonization of this country, till after the termination of the war of 1812-14, there was not one single building erected in Northern America which is worthy of being mentioned as an example of Architectural Art.

When after the termination of that war it became the manifest destiny of the United States to surpass all the nations of the earth in Art as in everything else, they set about doing something to justify the boast they were so fond of proclaiming.

Hitherto their attempts have been less successful than even those of the mother-country; and there is with them less prospect of improvement than with us. An American has a great deal too much to do, and is always in too great a hurry to do it, ever to submit to the long patient study and discipline requisite to master any one style of Architecture perfectly. Still less is he likely to submit to that amount of self negation which is indispensable if a man would attempt to be original. Why should he stop to design each detail to the place it is intended to occupy? Why should he try to proportion every part harmoniously, or to apply each ornament appropriately? Why submit to all this drudgery, when Classic pillars and Gothic pinnacles stuck on ad libitum get over all difficulties, and satisfy himself and his employers? The perfection of Art in an American's eyes would be attained by the invention of a self-acting machine, which should produce plans of cities and designs for Gothic churches or Classic municipal buildings, at so much per foot super, and so save all further trouble or thought.

The planning of cities has in America been always practically performed by these means; the process being to take a sheet of machine-ruled paper, and, determining the scale that is to be used, to divide the whole into equal squares easily staked out, and the contents of which are easily computed. Whether the ground is flat or undulating—

whether the river or shore on which it is situated is straight or curved—whatever the accident of the situation, or the convenience of traffic—this simple plan enables any man to lay out a city in a morning; and if he can do this, why should he spend weeks or months in carefully contouring the ground? Why proportion his streets to the traffic they are intended to convey? Why draw complicated curves so difficult to set out, and so puzzling to calculate? Why, in short, think, when the thing can be done without thought? It is in vain to urge that by this process the most prosaic ugliness has been stamped on every city of the Union hitherto laid out, when, by a little pains and a little more thought, far more beautiful and more convenient cities might have been produced. This may be true; but the first process answers all the purposes of a people who have so little feeling for Art that they do not perceive its deformity. The latter requires both time and thought, and why should they expend theirs upon it while the other supplies their wants?¹

The same system prevails in their buildings. If not so absolutely mechanical as their plans, it is still true that their principal drawing instrument is a pair of scissors; and a machine might guide these almost as well as a human hand, were it not that after being pinned together the design must generally be attenuated and pared down to suit the pecuniary exigencies of the case. Notwithstanding the defects of their system, the Americans have lately shown a great desire to display their wealth in architectural magnificence, and to rival the Old World in this respect; and have produced some very showy buildings, but certainly not one that can be seriously commended as an artistic design, and still less any one which can be quoted as a well-thought-out expression of a mind imbued with architectural taste and knowledge.

WASHINGTON.

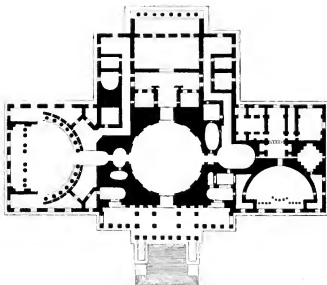
The principal edifice in the United States of America, or, at least, the one of which they are most vain, is the Capitol at Washington, which would be a respectable building anywhere, though scarcely deserving all the praise that has been bestowed upon it.

The eastern or principal front of the original Capitol extends 352 ft. north and south, or, as nearly as may be, it has the same dimensions as the central block of the river-front² of our Somerset House, which it very much resembles in style, and is not unlike it in arrange-

¹ Though the Americans have carried this principle to excess, it must be confessed that all cities which have been founded have more or less of this rectangular ugliness, which is only avoided in those which grow. The cities which the Greek colonists founded in Asia Minor, or on the shores of the Black Sea, were all more or less rectangular. Alexandria was completely so. The cities the Romans founded in this country were generally rectangular in plan. The Bastides which our Edwards founded at Guienne and elsewhere

in France were as formal as New York or Philadelphia; and in the dark ages of our Art we admired the plan of the new town of Edinburgh. In laying out towns, this mode of proceeding may be useful as avoiding some practical difficulties; but it certainly is absolutely destructive of all picturesqueness or beauty; and no city so arranged can ever display with pleasing effect such specimens of Architectural Art as it may possess.

² The front now extends to 600 feet.

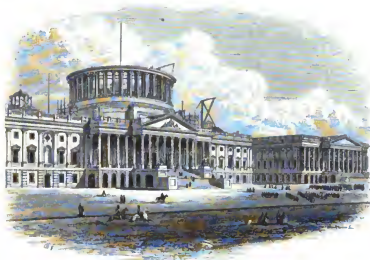


273. Plan of the original Capitol at Washington. Scale 110 feet to 1 inch.

ment. At Washington the pillars are taller and more prominent, but the basement lower and not so well proportioned to the upper part. But the great distinction is, that the Capitol is to be surmounted by a great dome, rising from a "tambour," surrounded by a peristyle of columns measuring 130 ft. across; and the height, from the ground-line to the statue which is to crown it, is intended to be 310 ft., or about that of our St. Paul's, but in this instance standing on a building only 69 ft. in height instead of growing out of one measuring 107 ft. from the ground to the top of the balustrade. When completed this will be a very noble feature, adding great dignity to the group; but by being placed immediately over and behind the portico of twenty-four detached columns, it will entirely ruin that which is now the principal ornament.¹ It is, in fact, always a mistake to place one range of columns immediately over another; and so large a feature as this dome will be must ruin the design of any building unless its apparent construction commenced from the ground-line. In this instance it would have been easy by a different arrangement to have exhibited this; but to place the dome on the roof of a building complete without it, was a blunder that nothing can now redeem, while, as the portico in front of it is of an unusually straggling design, this defect is more than usually apparent here.

¹ A curious illustration of this may be seen in London. The hospital of Bethlehem had originally only a portico in its centre, of no great beauty certainly, but pleasing because well proportioned to the building. Latterly

a dome has been erected over it, much to the same proportion to it as the Washington dome is to its portico. The outlines of the building may be improved by the addition, but the portico is crushed and had better be removed.

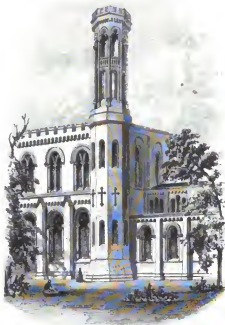


274.

View of the Capitol at Washington, with the proposed wings.

Two wings are now being added to the Capitol, which, when completed, will extend the front to a greater length than that of the whole river façade of Somerset House; and, as they are intended to project boldly forward, will prevent the dome overpowering the building to the extent it would do without them, though they cannot save the portico; and, after all, it is a question whether the terrace beneath the one façade is not a more pleasing feature than the dome over the other, though both are singularly destructive of the architectural effect which their architects so erroneously supposed they would assist. The truth of the matter appears to be that, though these tall Italian domes are very beautiful features in themselves, it has always been found extremely difficult to adapt them to the designs of which they are to form a part. St. Paul's is perhaps the most happily-contrived, but even it is not perfect; and the next best is probably the Invalides at Paris. In all other instances, either their height and their mass overpower the building on which they are placed, or, as at St. Peter's, the substructure hides and destroys the dome. When completed, it is to be feared that the dome of the Capitol will be about the least successful combination that has yet been attempted.

The Smithsonian Institute is another edifice of which the inhabitants of Washington are as proud as they are of their Capitol, though it differs from that building as much as any one can differ from another—rude, irregular Medievalism being here thought the perfection of Art, instead of the elegant Classical formality of the Capitol. It is of considerable extent, being 447 ft. long, with an average breadth of about 60, and one of the towers—there are eight or ten of these of various shapes and sizes—reaches a height of 141 ft. Its general plan



275.

Tower of Smithsonian Institute, Washington.

is that of an Abbey Church ; the centre block—the nave—is occupied by the Library below, the Museum above. The transept contains the mineralogical collection and the Regent's rooms ; what appears at one end to be an apsidal chapel externally, turns out to be a Gallery of Art, and this is balanced at the other end by a group of lecture-rooms and other conveniences. The style is Norman, though of a class that would have astonished a baron or a bishop of the eleventh or twelfth centuries, and resembles one of their buildings as much as the Pavilion at Brighton resembles the Tomb of Muckdoom Shah Dowlat, from which it is said to be copied. The annexed woodcut, representing an octagonal tower at the junction of the Library and Art Gallery, is a fair illustration of the style. It is one of the best of those which adorn the building.

In wonderful contrast to the broken outline and studied irregularity of the Smithsonian Institute is the cold machine-designed uniformity of the Treasury buildings just completed in the same city.

In this country we are generally content with putting two stories of windows under one storey of pillars, though, once the pillars become merely an ornament, there does not seem any greater incongruity in putting a dozen. In the present instance there are three of very com-



276.

New Treasury Buildings, Washington. From a Photograph.

monplace design, and without any apparent connection with the Order or the Order with them; there is nothing, in fact, to redeem this design from the merest commonplace—no beauty of form or of outline—and the portico in no way harmonizes with the wings. It is, however, far more appropriate to a city designed after the fashion of a chess-board, than such an irregular building as the Smithsonian Institute.

Another educational institution of which the Americans are equally proud is the Girard College, Philadelphia. It is designed on principles so totally different that either the word Architecture has a thousand meanings, or those who built this do not understand the term. In this instance, instead of florid Norman, the exterior is that of a Roman temple 218 ft. long, but with the rather disproportionate



277.

Girard College, Philadelphia.



278.

State Capitol, Ohio.

excess of width of 159 ft. The columns are 6 ft. in diameter and 55 in height. Being of marble, it would really be a very fair kind of Walhalla were it not that where the Cella ought to have been we have instead a very ordinary commonplace two-storied college-building enclosed in this cage of pillars.

The United States Bank in the same city is a grand Grecian Doric temple—at one end, at least—but with the same two stories throughout in the Cella, with the additional incongruity that the upper storey has small square bedroom-like windows, which give a great appearance of meanness to the whole. Though the Exchange of Philadelphia possesses all these solecisms, it is a far more pleasing specimen. Its circular colonnade, its belfry and general arrangement, evince an amount of thought and design seldom found in this country, and, the details being Corinthian, it is saved from either vulgarity or meanness, though it has not any real architectural importance.

There are a number of buildings of this class in the various cities of the Union, some of which are big, some rich, but not one, so far as is known in Europe, either remarkable for the design of its outline or the appropriateness of its details. The edifices on which the Americans have lavished their utmost energies are the State Capitols, in which the representatives of each of the independent States meet in Parliament. One of the most recent and most admired after that of Washington is the one just completed for Ohio. This time the Order is Doric, and the design—or outline, at least—as severe as could be desired; but the usual two stories of windows, the chimneys, and other appendages which will not be hid, betray the fact that we are not looking at a temple, but a secular building of modern date which its architect

squeezed into this mould in order to save himself trouble and the necessity of thinking.

Most of the older Capitols have not the same pretensions as this one, and escape criticism accordingly; but wherever ornament is employed, it is badly executed by the hands of amateurs, and in a country where the necessary means did not exist for even architects—if they had existed—to study and to inform themselves correctly as to what was really the right and proper course to pursue.

ECCLESIASTICAL ARCHITECTURE.

The Americans have probably been even less successful in their churches than in their secular buildings; and, considering how little ecclesiastical establishments enter into their system as compared with civil government, this is not to be wondered at.

Down to a very late period America did not possess a single church that could rank higher than an ordinary parish church of the Hawksmoor or Gibbs class, and none so splendid as St. Martin's-in-the-Fields, St. George's Hanover Square, or any of our buildings of that class. Latterly, however, they have followed our footsteps in abandoning the Italian style in churches, and have adopted the so-called Gothic, though in this respect they are hardly so much advanced even now as we were twenty or thirty years ago, and are only getting through the sort of dilettanti amateur business that we shook off at that time.

The American architects, however, labour under peculiar difficulties in this respect; they have not that crowd of examples which meet an Englishman at every turn, and which he can study at all times without any effort; so that, once he has thoroughly imbibed the spirit of the old examples, it is very difficult for him to do wrong. If it were possible to conceive the Americans taking the time and trouble necessary to think out a common sense style, this ought to be an advantage, and they might really become the authors of a new form of Art; but with a people in such a hurry it is fatal; and they not only copy, but copy without understanding—a reproach that cannot *now* be applied to our architects in this country.

Perhaps the most ornate church they have yet erected is the so-called Graco Church in New York. If richness of ornamentation could make a building beautiful, it certainly is applied here in abundance. But the plan of the church is a mistake. A double-aisled transept is a feature belonging only to a cathedral: as applied here it dwarfs the whole and makes the design entirely inappropriate for a moderate-sized parish church. The spire also is far too high, too large for the rest. Internally the whole is vaulted (in plaster), and every feature such as would only be applicable to a more ambitious class of edifice, and, even then, hardly to be found in so late a style.

Calvary Church is a still more characteristic though much admired example. It possesses two western spires—as at Cologne—but the open work of the upper part is only painted deal. And the Church of



279.

View of Grace Church, New York.

the Holy Redeemer in Third Street, in a sort of Russo-Lombardic style, it is extremely difficult to criticise.

One great attempt at originality and magnificence the Americans certainly have made in the two temples which the Mormons have designed as the high places of their religion. It is not quite clear that the Temple at Nauvoo was ever completed, though in several books illustrations of it were published. At all events, whatever was erected is now destroyed; and that at Utah, which is meant to be a great improvement on the original design, is only yet on paper. The dimensions of these Temples in plan were to be very considerable, and their height in proportion. Though intended internally to be only one hall, externally they were four or five stories in height, and resembled the Town-hall at Louvain more than any other building in Europe; but to make the resemblance at all complete it is necessary to realize the

Belgian example carried out in plaster in the details of the Strawberry Hill style of Gothic, and with every solecism which ignorance of the style and vulgarity of feeling can introduce into a design.

There is nothing in Europe so bad in an architectural point of view as these temples would have been; but, on a smaller scale, many of the American churches are nearly as inartistic, though, from their less pretensions dimensions, they are not so offensive. All that, in fact, can be said with regard to them is, that, whatever faults we have committed in this respect, the Americans have exaggerated them; and the disappointing part is, that they do not evince the least tendency to shake off our errors in copying, which, in a new and a free country, they might easily have done, while it must obviously be more difficult for us, where time and association have so sanctified the forms we are reproducing.

BOOK X.—THEATRES.

No mention has been made in the previous pages of this work of the Theatres of modern times, though their importance is such that no history of Architecture could be considered complete without some reference to them. If not so important as the Mediæval Cathedrals, they at least come next to them in scale in modern times. No important capital city in Europe is without its Great Opera House; and, in addition to this, all possess several Dramatic Theatres, and even every provincial town has its place for theatrical representations as certainly as its smaller predecessor would have had its parish church. Many of these edifices cost as much to erect as their ecclesiastical prototypes in the middle ages, and of those on which less was expended originally it may safely be asserted that their furniture, decoration, and maintenance cost more than the older buildings, many of whose purposes, these less creditable institutions now fulfil.

Instead of mentioning the Theatres of each nation separately, it will be found more convenient to treat them as one group, as they have no nationality,—the designs of those of Naples or St. Petersburg being practically identical, while those of London or Paris would suit equally well for any capital in Europe; and it would be tedious to interrupt the narrative of local peculiarities in order to repeat over and over again what may be said once for all.

There is another circumstance which renders it expedient to treat of the Theatres apart from other buildings, which is that they alone have escaped—in their internal arrangement, at least—from the influence of the copying school. It is true that, when permanent Theatres first came to be erected in modern Europe, Palladio did build one at Venice, and Serlio another at Vicenza, according to the precepts of Vitruvius; and, in the last days of his career, the former architect designed the celebrated Theatre Olympico at Vicenza, which still stands a monument of his classical taste, and boasts of being the oldest permanent theatre in Europe, at least of those built since the time of the Romans. It was, however, also the last of its race; for, though Classicism or Mediævalism may do very well for churches, managers of theatres are in earnest, and their audiences insist on both seeing and hearing what is going on, and will not be content with being told that it is correct to sit behind a pillar where nothing can be seen, or under a roof where every sound is lost. The consequence was that architects were forced to try if they could not invent something more suitable for modern purposes than the great conch of an ancient theatre, and better and more convenient than the locale in which

Mediæval mysteries were wont to be performed. The result has been that modern Theatres, so far, at least, as concerns their internal arrangements, are the only important buildings in modern times designed wholly without reference to precedent, and regarding which an architect really must think what is best to be done and how he can best do it. It hence arises that in speaking of them we must revert to our old principles of criticism, and explain their peculiarities as if they were the works of reasoning men and not the products of copying machines.

From these circumstances our Theatres would be by far the most satisfactory of our Architectural productions if it were not that, in almost all cases, economy is one of the first exigencies to be attended to. With very few exceptions Theatres are private commercial speculations got up for the purpose of making money; and even when governments assist or interfere, economy of space, if not of money, has always to be attended to, one consequence of which is that no theatre in Europe is constructed internally of such durable materials as are requisite to Architectural effect. The boxes and fittings are generally of wood, often capable of being removed, and always with a temporary look about them very destructive of grandeur.

Notwithstanding these defects, great halls, sometimes measuring more than 100 ft. by 70 or 80, and 80 or 90 ft. in height, without any central support, decorated, with more or less elaboration, from floor to roof, must almost of necessity be objects of considerable magnificence; and when to this we add that they are all honestly designed for the purposes to which they are applied, we may turn to them with a satisfaction we can scarcely feel in contemplating the greater number of the buildings we have just been describing.

The earliest theatres of Italy or Spain were the Cortiles of the former and the Corrales of the latter country, — courtyards, surrounded by balconies or arcades from which the spectators could see or hear what passed on a temporary stage erected against one side of them, on which the simply-constructed early dramas were performed, always in broad daylight.

In France, where the climate did not so readily lend itself to outdoor representations, the earliest theatres seem to have been the tennis or racket-courts, which were admirably adapted to the purpose. A stage erected at one end, and two or three galleries at the other, with a spacious "parterre" between, enabled a considerable audience to see and hear with great facility; and, except that the receipts would be limited by the loss of the accommodation of the side boxes, this form of theatre has even now much to recommend it.

In England the cockpit or bear-garden seems to have been the earliest model, and was by no means an incapable one if properly worked out, combined, as it might have been, with the galleries surrounding the courtyards of our hostleries, which was the other model at our disposal.

Except the classical theatres mentioned above as erected by Palladio and Serlio, there does not appear to have been any really permanent building in Europe for the purpose of theatrical representations until after the expiration of the 16th century. During its course, however, plays had become so important an element in the literature of almost every country in Europe, and witnessing their representation so fashionable an amusement, that it was impossible it should long remain thus. We consequently find the theatre of the Hôtel de Bourgoyne rising into great importance in Paris in 1621, and being rebuilt in 1645 with tiers of boxes, but arranged apparently on a square plan. In 1639 Richelieu built the original theatre of the Palais Royal, which was long considered the type and model to be followed in the design of such structures.

In Venice a theatre was erected in 1639, with two tiers of boxes arranged circularly round a pit sloping backwards as at present, thus really inventing the present form of theatre; and in 1675 Fontana first introduced the horseshoe form in a theatre called the Tordinoni which he erected in Rome.

In this country the first permanent theatre with boxes seems to have been the Duke's Theatre in Lincoln's Inn Fields, erected in 1662: it certainly was the first in which scenery was introduced and the other usual appliances of scenic decoration.

Fontana's invention may be said to have completed the modern theatre in all its essential parts, but it took another century before all the problems connected with the representation of a modern drama were complete. In 1754 Sufflot erected the theatre at Lyons, which was long regarded by French architects as the most perfect model of an auditory which they possessed; and in 1777 Victor Louis built the great theatre at Bordeaux, which was then and is now externally the very finest edifice of its class to be found in France,—it may almost be said in Europe. About the same time (1774) Piermarini built the Scala at Milan, which is still perhaps the best lyric theatre in existence; though we had nothing to compare with these edifices until Novosielski rebuilt the Opera House in the Haymarket, very much as we now find it, in 1790, and Smirke and Wyatt rebuilt Covent Garden and Drury Lane Theatres in 1808 and 1812 respectively.

The first really important theatre in Germany was the Opera House at Berlin, built by order of Frederick the Great in 1741. In Russia the Theatre is an importation of very recent date; but being patronised by the Imperial Family and fostered with subventions from the state, the lyric theatres of St. Petersburg and Moscow equal in extent and splendour those of any other of the capitals of Europe.

CONSTRUCTION OF MODERN THEATRES.

The problems involved in the construction of a modern theatre are infinitely more complex and difficult than those presented to the designers of the theatres of the ancients. The dramas of the Greeks and Romans, or at least those which were represented in their great

theatres, were of the simplest possible kind. The action took place on a pulpitum or raised platform in front of a fixed architectural screen. The dialogue was simple, rhythmical, and probably intoned, and the choros sufficiently numerous to make their united voices heard anywhere. The class of spectacle in modern times most like these great dramas is probably the Oratorio; and the experience gained by representations of that kind at the Crystal Palace has proved how easily a theatre could be constructed with at least a 300 feet radius (the greatest ever used by the Greeks), where 20,000 persons could be seated at their ease and still hear even the low notes of bass voices with very enjoyable distinctness;¹ consequently, were our objects the same as those of the Greeks, the solution would be easy.

The introduction, however, of painted moveable scenes, which seem first to have been invented by Baldassare Peruzzi and used by him in 1508 in a piece called 'La Calandra,' when it was played before Leo X., and the further development of this invention, which was so thoroughly in accordance with the spirit of the age, led to the necessity of a recessed stage with a framing like that of a picture. Once arrived at this point, all the conch-like arrangement of the Classical period became inappropriate, for it was evident that only on the tennis-court plan could all see equally well into the room in which the action was taking place. As, however, a spoken dialogue can hardly be well heard at a greater distance than 75 or 80 ft., nor the expression of a countenance well appreciated beyond that distance, it was evident that not more than from 600 to 1000 persons could be accommodated in such a room, assuming its width to be 40 or 50 ft., which was about as much as could then be conveniently roofed over.

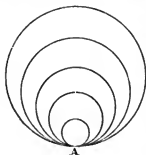
In order to increase the accommodation, the galleries or boxes, which had at first been only established at the far end of the hall, were carried also along the sides; and of these, two, three, or even four tiers were introduced. The next improvement was rounding off the corners, until, bit by bit, and step by step, the modern auditory was invented. This may generally be taken as represented by a circle described in the front of the curtain with a diameter about double the opening of the stage. In lyric theatres, where music only is performed, and where, consequently, hearing is easier and seeing less important, the curve is elongated into an ellipse, with its major axis towards the stage, so that the number of side boxes and the depth of the pit may be considerably increased. In theatres intended only for the spoken drama, where, consequently, hearing is more difficult and distinct vision more important, the contrary process may be pursued with advantage, and the front boxes brought nearer the stage than even the circular form would demand.

¹ The Crystal Palace was not designed with any reference to such representations, and its flat floor is singularly unfavourable for the transmission of sound; but, notwithstanding

this, ten or twelve thousand persons can hear the solo parts even very tolerably, and fifteen or twenty thousand can enjoy the choruses.

The half of the circle farthest from the stage is generally allowed to remain unaltered, but the two quadrants next the curtain are opened out and bent back in a variety of curves; but, though volumes have been written and the best architectural talent of the world has been applied experimentally to the subject, the exact form in which this should be done is far from being settled. It is exactly, however, the same class of problem as that involved in the determination of the exact curve for a ship's bow or stem, the midships section in both cases being given. Neither of these problems has yet been finally solved, and, from their nature, probably never will be, as the circumstances are continually altering; but they are nevertheless both very near the best practical solution possible, and nearer it than any other problem connected with Architecture in modern times. This might be expected from the fact before noticed that the curve of the auditory of a theatre is almost the only real question that can be submitted to the intellectual investigation of an architect at the present day. Being so, it may be worth while to try and explain briefly the principal conditions on which it rests.

If it were not that the science of acoustics is one of the least perfect branches of human knowledge, and its practical application certainly the least understood, it would be easy to explain the principles on which theatres should be arranged. But, in order to render what follows intelligible, it is necessary to say a few words as to the motion of the sound-wave. The most popular illustration of the diffusion of sound horizontally is obtained by the analogy of a stone being dropped into a piece of still water, when circular waves radiate in every direction, till at last they die away altogether. But this involves two errors. First, to make the analogy at all represent the real circumstances of the case, the singer must be lying on his back, and sing or speak with his mouth upwards; but this is never



280.

the case; the voice is always thrown forward, and practically the form of the sound-wave is something very like the diagram, Woodcut No. 280, the speaker being at A. In perfectly still air and where no interruptions occur, the sound-wave would always take this form. The second error is the assumption that sound is a succession of waves such as those produced by dropping a stone in water, whereas the reverse is the case. The sound-wave is single, such as is produced in water by one blow or one action; and all sounds travel with a practically uni-

form velocity, so that each sound gets out of the way of the next that proceeds from the same source. Were it not for this, distinct articulation would be impossible.

Knowing the form of the sound-wave, two questions arise which are both of the greatest possible importance to the theatrical architect.

First, Are there any means by which its intensity can be increased, and its area extended?

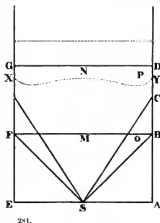
Secondly, What are the circumstances which may interfere with its onward progress or its practical distinctness?

In order to answer the first, let it be supposed that a speaker or singer is standing at *s* in a square room, *A D G E*. It is found practically that all the waves impinging against the wall between *A* and *B*, or under an angle of 45 degrees, are reflected, producing confusion, but no increase of intensity. Between *B* and *c*, or up to 57 degrees, the reflexion is so slight as hardly to be objectionable. Beyond that there is no reflexion. The wave gradually assumes the form *x y*, and, after travelling a little farther, becomes practically a straight line; and if confined between two walls, it will travel infinitely farther than it would do if perfectly unconfined.

The practical result of this description is, that, within the square in which the speaker is standing, no sensible increase of sound can be attained by any confinement, but great danger of confusion from reflexion. Beyond the square, the lateral limitation to dispersion becomes more and more valuable as we proceed onwards, with no danger from the reflex wave, unless from a wall at the end, from which the wave coming back meets that going forward, and may produce confusion and indistinctness to a considerable extent.

With regard to the second question, it is easy to answer, that, practically, the people sitting in the triangle *s A B* are in great danger of hearing very indistinctly in consequence of reflexion. If there was a wall at *F B*, a person at *M* could hardly hear at all; and even if *G D* were a wall, a person at *N* could only hear indistinctly in consequence of the reflex wave and the remaining slight reflexion from *A B*. If the sound were single, it might be only an echo; but if sounds followed one another in rapid succession, a multitude of echoes would produce practical deafness, and at *o* and *p* hearing would be almost impossible under any circumstances, but much more difficult in the former than the latter position.¹

If, for instance, the backs of the boxes of a theatre were lined with mirrors, as has been proposed, and the fronts made of some hard polished substance, it is more than probable that the words of a quickly-spoken dialogue, or the notes of a quick piece of music, would be



¹ The only person I know of who has thoroughly investigated the motion of the sound-wave, and studied its effects, is Mr.

Scott Russell, to whose researches I am mainly indebted for the above information.

absolutely inaudible in even the smallest theatre; whereas, if the backs of the boxes were entirely removed, and the fronts reduced as much as possible,¹ every sound would be heard clearly and distinctly. The practical objection to this solution is the difficulty of preventing external sounds from interrupting the audience, and the necessity of still air for distinct hearing.

The practical answer to the first question is, that very little advantage is obtained by any confinement or guidance of the sound-wave. It is true that, if a room were 50 ft. wide and 500 long, those beyond the first 100 ft. would hear better in consequence of the side walls, and those at 500 ft. might hear tolerably what without the walls they would not hear at all; but the 5000 people such a room would contain would hear infinitely better in a room 100 ft. wide by 250 long; and 10,000 might hear as well in a curvilinear-formed room, adapted especially to the form of the sound-wave, without any confinement, but also it must be without any reflexion.

It is the form of the latter—which is involved in the second question—which is the great difficulty of the theatrical architect; so that, after all, the answer to the inquiries is far more negative than positive. It does not result in the discovery of what should be done to increase the sound, so much as in a knowledge of what to avoid in order not to interfere with its smooth and uninterrupted progression. What an artist ought to think of when designing a theatre or concert-room is not how to increase the sound—that he may leave to itself—but how to prevent reflexion from the voice of the speaker or singer; how he may shut out external sounds; and, lastly, how he best can trap off the conversation or sound of one part of his audience so that it shall not disturb the rest—how, in fact, he can best produce a silent theatre.

Without attempting to pursue the abstract question further, it may be asserted that the wonderful instinct of the Greeks, which enabled



282.

them always to do the very best thing possible in all that concerns Art, caused them to hit on the very best form in plan for the transmission of the greatest quantity of sound, with the greatest clearness, to the greatest possible number. Their mechanical appliances did not admit of their adopting a roof; but if we were now to build a place—irrespective of architectural beauty—in which 20,000 were to hear distinctly, we should adopt the plan of a Greek theatre,² with probably a section similar to that shown in Woodcut No. 282.

¹ A curious illustration of this is quoted by Mr. Bazley, in his evidence before a Committee of the House of Commons on dramatic literature. The theatre at Lisbon was considered one of the best in Europe; yet, after a short time, they found the sound was lost,

when it was discovered that it was in consequence of certain passages at the backs of the boxes being stopped up; and when they were reopened the sound returned!

² The flat floor of the Crystal Palace is nearly fatal to its use for great numbers, as will

The great difficulty in applying a roof is, that, if any sound is reflected back from it at an angle of 45 degrees, it produces indistinctness of hearing on the part of the audience; and it must therefore be so constructed that this shall not be the case.¹

So far as more hearing is concerned, it is only the greatest possible space within the limits of the sound-wave, in which perfectly still air and freedom from external sounds can be obtained; but with seeing the case is different. The Greeks tried to get over this difficulty by the introduction of masks so broadly moulded as to admit of the markings being seen at a great distance; and they elevated their actors on high-heeled shoes, and used every conceivable device to make them look large; with what degree of success we can hardly judge. We escape this difficulty, to a considerable extent, by the introduction of opera-glasses and optical contrivances; but with all our modern science, this will probably always limit the size of the auditory of modern theatres to about 100 ft. from the curtain to the front of the opposite boxes. The consequence is that even a lyric theatre can hardly be constructed to accommodate more than 3000 or 3500 persons. A dramatic theatre is limited to about 2000 or 2500, though a concert-room might easily be made to contain 5000 to 10,000, and a festival-hall 15,000 to 20,000 persons.

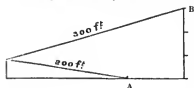
Besides these abstract questions, which arise from the natural limits to our powers of hearing or seeing distinctly, there is still another inherent on the necessity of our seeing *into* a room or enclosed stage in which the greater part of the action takes place. This does not affect either the pit or the front boxes, but it is all in all to the side boxes, which are in fact the great crux of the theatrical architect. These are of necessity placed so obliquely that only the persons in the front row can see at all, if the boxes are closed at the sides. If open, they see obliquely; and, what is worse, if high up, look almost perpendicularly down on the stage, which is perhaps the most unpleasant position in which a spectator can well be placed.

This last inconvenience could be almost entirely obviated by the

easily be understood from the annexed diagram (Woodcut No. 283). In the first place, the portion of the sound-wave that is distributed over the floor is only a very small section of the whole—not 10 degrees in 180. This would not be a disadvantage if the floor were polished glass or still water; but when it is rough with human beings a great portion is absorbed and lost, and the rest cannot travel with facility. The consequence is that a person at A, 200 ft.

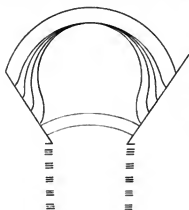
from the orchestra, hears very much less perfectly than one at B, 300 ft. distant.

¹ The great roof that has recently been erected over the Handel orchestra at Sydenham is supposed to have increased largely the volume of sound. Its practical working, however, is this: it had absolutely no effect whatever on the solo voices or the instruments in front. It softens immensely, and increases the power of the organ placed near the roof at the back by reflecting and repeating its notes, but at so immeasurably short an interval that they reach the audience as single notes mellowed. It had a similar effect on the chorus voices at the back, reflecting them forward at imperceptible intervals, and so bringing the whole chorus more together, and delivering it to the audience as one grand voice, far more perfectly blended together than was the case before the roof was erected.



283.

arrangement suggested in Woodcut No. 284, keeping the centre boxes perpendicular one over the other, which is indispensable for seeing;



284.

and if not the best for sound, that defect may be remedied by using soft stuffs, which will absorb and so neutralize the evil effects of what ought to be transmitted. Then by throwing back each tier of side boxes till the last is a semicircle, the whole audience would sit more directly facing the stage, would look at it at a better angle, and the volume of sound be considerably increased throughout the whole house by its freer expansion immediately on leaving the stage. It would besides be an immense improvement in the appearance of the house, relieving the dull

uniformity of tiers of boxes piled one over the other in unvarying monotony, and would render the construction also much easier by dispensing with the iron supports of the boxes altogether.

Another advantageous change will soon also be probably accomplished. A few years ago two or three rows of orchestra stalls were all that were tolerated even in our lyric theatres, and they were unknown in the playhouses; by degrees they are encroaching on the pit of these, and in our last Opera-house the pit has become a nearly evanescent quantity. It is to be hoped it will soon disappear altogether, for it cannot be denied that the "parterre" is the best place for seeing and for hearing, the most easy of access, and the best ventilated. If it were so arranged as to form one with the lower tier of boxes, both being accessible through the great dress saloon, the improvement to the appearance of the house would be considerable, and the profits of the manager also probably increased.

This is not the place, however, to insist on these and other obvious ameliorations. The matter is in the hands of men of intelligence, and who have a shrewd appreciation of what is best, while there is no real obstacle in the way of progress. The Classical examples, as has just been explained, are not suitable for models; and most fortunately there are no Gothic remains to force managers to adopt the barbarisms of the Middle Ages. The only misfortune is, that, in this country at least, economy both of space and money must always be the ruling motive in every design, as all theatres are merely private speculations. On the Continent, where the Government generally subsidizes and controls, this should not be so; and if the new Opera House now erecting at Paris is not a model of all that is excellent in acoustics and beautiful in form, it will be that France does not possess an architect equal to the task. The situation is free and open, the expenditure unlimited,

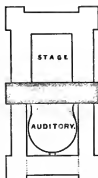
and all that is required is that 2000 persons should be so placed as to sit luxuriously and hear clearly. With the experience already gained, and the unlimited means now available, there is no problem in modern theatre-building which should not be advanced, almost set at rest, by that great undertaking.

Although the interiors of theatres in modern Europe have, for the reasons just stated, been treated according to the principles of common sense, their exteriors have unfortunately been handed over to the "dealers in Orders" in the same manner as other civil buildings; and owing to their nature the application of these features has been generally less successful than elsewhere. The fact is, a theatre is a very multifarious building, and, in some parts at least, neither very dignified nor appropriated to dignified uses. It consequently is extremely difficult to make it look like one grand hall, which is the aim of most architects, and still more so to make it look like a Roman temple, with which it has absolutely no affinity. These difficulties, however, are entirely of the architect's own creation. The dimensions of a theatre are almost always magnificent, not only as regards length and width, but also in height, and they generally stand free and unnumbered; so that an architect is certainly to blame, if, with these materials, he cannot make an imposing design.

The difficulty which has spoiled most of the external designs of theatres is that they are composed of two very distinct parts, as will easily be understood from the annexed diagram, Woodcut No. 285. The one devoted to the audience, consisting of the auditory, the saloons, staircases, and passages—all these are on a sufficient scale and sufficiently ornamental to be treated in a dignified manner; but the other half, devoted to the stage, is surrounded by dressing-rooms, workshops, store-rooms, and offices of all sorts. These seldom require to be more than 10 or 12 ft. in height, while the saloon may be 30 or 40. Where architects have generally failed has been in the attempt to make the stage part look as dignified as the audience half, or in despair have toned down the latter to the level of the more utilitarian division.

If the parts were accentuated as shown in the diagram, there is no reason why they should not be treated differently; but every reason, indeed, why this should be done: and if the whole were bound together by a bold uniform cornice, and the angles all treated similarly, which could easily be done, there is no reason why the one part should not be ten stories high, and the other only two or three; and if the vertical piers were sufficiently prominent and strong, the one may be made architecturally as beautiful and as dignified as the other.

In lyric theatres the central shaded division would belong to the



285.

audience part, as that is always more important in them than in dramatic theatres; in the latter it would belong to the stage, which requires a greater development; and it of course, in either of these cases, ought to be treated according as that division is designed to which it belongs.

This, unfortunately, is not the way the question has hitherto been looked at: and the consequence is, as we shall presently see, that no theatre in Europe can be considered as a perfectly successful design externally, though many, from their dimensions and the richness of their decorations, are very grand and imposing edifices.

It is only to be hoped that some architect will some day apply to the exterior of a theatre the same principles of common sense which guide him in designing the interior, and we may then see a building worthy of its age and of the art of Architecture!

LYRIC THEATRES.

The theatrical buildings of Modern Europe may be classified under four distinct heads:—

1. Lecturo Theatres.
2. Dramatic ditto.
3. Lyric ditto.
4. Music-Halls or Concert-Rooms.

The first and last are governed by precisely the same principles, for whatever is good to speak in is also appropriate for singing, only that the greatly increased space-penetrating power of the modulated human voice enables the latter to be constructed on an immensely extended scale as compared with the former. Strange to say, although in our lecture-rooms we have generally adopted the principles of a Greek theatre, no large concert-room or music-hall has yet been constructed on the same plan.

The lyric differ from the dramatic theatres only in this: that in the former, seeing being less important and hearing more easy, their auditory may be increased in extent; and this may be done by a development of the side boxes in such a manner as would be inadmissible in a building where it is so especially necessary that everything should be seen that passes on the stage.

Were it not that the ballet is an almost invariable accompaniment to the opera, the stago in a lyric theatre might also be relatively very much diminished as compared with a dramatic; but as these spectacles require quite as much space for their display as any dramatic representation, this is not usually found to be the case.

The dimensions of the principal lyric theatres in Europe are exhibited in the following table.

INTERNAL DIMENSIONS OF THE PRINCIPAL LYRIC THEATRES.

	Depth from Curtain to back of Boxes.	Width across Boxes from back to back.	Width of Curtain.	Depth of Stage.	Height over Pit.	Saloon Dimen- sions.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
La Scala, Milan	105	87	49	77	65	20 × 80
San Carlo, Naples	100	85	50	74	84	..
Carlo Felice, Genoa	95	82	49	80	55	40 × 50
Opera House, London	95	75	38	45	51	22 × 66
Turin Opera House	90	71	50	110	55	..
Covent Garden, London	89	80	47	89	70	25 × 84
St. Petersburg Opera	87	70	52	100	56	33 × 85
Académie de Musique, Paris	85	80	41	82	65	25 × 190
Parma Opera	82	74	47	76	..	38 × 38
Venice, Venice	82	78	41	48	..	..
Munich Theatre	80	75	41	87	70	..
Madrid Theatre	79	89	60	55	..	..
Alexandra, Petersburg ¹	79	73	52	82	60	38 × 40
Darmstadt Opera	72	62	40	70	51	28 × 56
Berlin	70	55	37	58	47	41 × 80
Vienna	65	55	45	72	52	..

From the above table it will be perceived that there are at least six lyric theatres in Italy of the first class, and nearly of the same dimensions. The Scala at Milan is in some respects the largest of these, and is generally admitted to be the best arranged both for hearing and for seeing, so far as the last is thought indispensable for an opera-house.

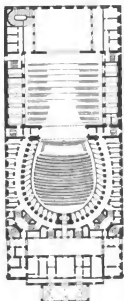
As far back as 1719 Milan possessed what was then the largest theatre in Europe, erected from the design of Barbieri; but this was entirely destroyed by fire in 1776, when the present theatre was commenced from the designs of the celebrated Piermarini, and completed in two years.

Its length is 320 ft.; its width 130; and it covers consequently about 40,000 square feet, or something less than the ordinary dimensions of a Mediaeval cathedral, though its cubic contents are probably more than the average of these buildings. The façade towards the Place is more pleasing than most of the designs for theatrical façades, though of no great architectural pretensions, consisting of the usual elements: a rusticated basement, including an entresolo; a principal storey, with a Corinthian Order; and an attic. As there is only one range of windows under the Order, and the parts are well proportioned to one another, all this is unobjectionable; and if the Order must be used,

¹ The principal part of the information in this table is taken from the plates in Clement Contant's '*Parallèle des Théâtres Modernes*,' one of the very best and most useful works on the subject; but the reader must be warned that there are several sources of error which it is almost impossible to guard against. First, the general incorrectness of all plans;

secondly, the carelessness with which scales are too often applied, especially in French works; and lastly, that theatres are continually changing, either from being burnt down, or from improvements; for, as they are works of true Art, no one ever hesitates to improve them to any extent that may be required.

there was not much else to be done. But the architect's chance was on the flank. Here he built an immense wall 300 ft. long, 90 ft. high, and with nothing particular to control his arrangements except this—



236. Plan of La Scala, Milan.
Scale 100 feet to 1 inch.

that in parts it is seven and eight stories in height, and all these of nearly equal dignity (or rather equal want of it). To carry the Order of the bel étage all round was consequently out of the question; and being checked in this, he seems to have given up the attempt in despair, and left the sides of his building looking very like a Manchester cotton-mill. Had he only grouped his openings a little, strengthened the piers between them, and added a cornice at the top, with a moderate amount of dressings to the windows, he would have produced the most original and striking façade in the city; but this would have required an amount of thought which was not then exacted from any architect, so he left it as it is—imposing from its mass, but wholly devoid of architectural merit.

Internally the auditory is surrounded by seven tiers of boxes, similar in extent and height, and very nearly so in design. There is no "balcon" as is usual in French theatres, and no galleries as in ours. There is no doubt that this extreme simplicity of arrangement does give a very considerable degree of grandeur to the internal appearance of the building, but it challenges also a certain monumental class of treatment in which theatres are generally very deficient; and when this simplicity is carried to the extent it is

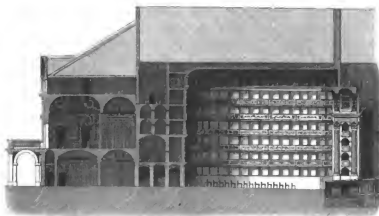


237. Façade of La Scala, Milan. Scale 50 feet to 1 inch.

in Italy, it is not free from the reproach of monotony. Still, when lighted and well filled with a brilliant audience—as is generally the case—the effect of the auditory of the Scala is unsurpassed by any other theatre of Modern Europe: and its acoustic properties are also good; the greatest objection

being that the boxes in the upper tiers near the stage are more than usually inconvenient for either seeing or hearing.

As will be observed from the plan, a small salon or cabinet is attached to the greater number of the boxes—not immediately, but across the passage. In one respect this is objectionable, inasmuch as,



280.

Section of the Auditory of La Scala. Scale 50 feet to 1 inch.

if adjoining, the anteroom is valuable in preventing the interference of external sounds; on the other hand, as situated here, each salon has access to external light and air, which in a theatre sometimes used in daylight, and in the Italian climate, is an immense advantage. The existence of these seven tiers of small cabinets was one of the causes why the architect despaired of rendering the sides of his building architectural, and refrained from attempting to harmonize them with the principal façade containing the great saloon and other state apartments of the building.

Next in importance to the Scala is the San Carlo Theatre at Naples, built in 1737, and reconstructed very nearly on the same plan after the fire in 1816. Externally its façade is by no means without originality or merit. But the height of the basement, 40 ft., is too great for that of the upper storey, which reaches only 20; and the whole height of 60 ft. is disproportioned to the other dimensions of the building. Internally, too, the size and height of the boxes are very much greater than in the Scala. There are only 6 tiers instead of 7 in height, and 28 in plan instead of 38 in each tier. This increase in their dimensions is not sufficient to give them a character of grandeur, but, on the contrary, only tends to make the whole theatre look very much smaller, besides diminishing the accommodation to a very considerable extent.

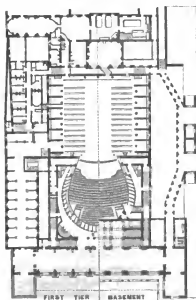
The theatre of Carlo Felice at Genoa, and that at Parma, differ very little from these except slightly in dimensions, only that they possess saloons of large dimensions and richly ornamented; and that of Turin possesses the rudiments of a gallery above the boxes.

The two great theatres of St. Petersburg and that of Moscow are on the same scale, and arranged internally very much in the same manner, as these great Italian examples; except that in Italy there is a certain air of completeness and of fitness, as if the people and the theatre belonged to one another, which is somehow wanting in the Russian examples, and gives an exotic look to the whole. Extern-

ally, however, the Russian theatres are very grand masses: they stand perfectly free, have great porticoes of pillars at one end, not very congruous perhaps but very large, and the whole has a dignified and imposing look; though, like most of the buildings in that country, showing very little thought, and a design that will not bear dissection.

Our own Opera House, Haymarket, is modelled on the Scala at Milan, which it resembles in most respects internally, except in the introduction of a spacious upper gallery, which to a certain extent destroys the grand simplicity of the design of its prototype; and considering the difficulties of the case, Nash probably showed more ability in fusing together the various elements he had to deal with on the exterior, than in any other design he carried out. It is not very grand, but, as more than half of the external elevations consist of shops and dwelling-houses, it was not easy to make much out of such heterogeneous materials.

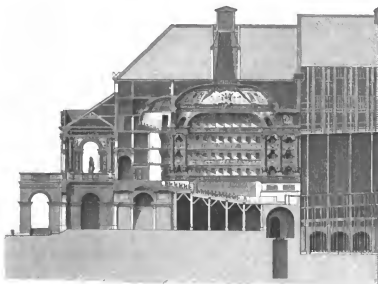
The Opera House at Paris, or Académie de Musique as it is usually called, is constructed on totally different principles from those just



209. Plan of Académie de Musique, Paris.
Scale 100 feet to 1 inch.

described. It is, in the first place, very much smaller, containing only four tiers of boxes, and these of less extent. It has besides capacious galleries. The great distinction, however, is the extent to which decoration is carried, and the immense development of the accessory apartments. It may be a question whether the four groups of pillars which are introduced to give apparent support to the dome are legitimate modes of decoration, or whether the simple outline employed by the Italians is not better. Wherever they may be placed, they must obstruct the view of a certain number of persons. But ought a great national theatre to be constructed on the simple principle of accommodating the greatest number of persons?

The auditory is generally as pleasing and often as interesting a part of the entertainment as what passes on the stage; and a certain amount of decoration, even at some sacrifice of space, is surely a legitimate expenditure there. A more pertinent question is, whether that effect is best attained by introducing Corinthian columns as in the Paris Opera House, or whether the same richness of effect might have been obtained without breaking the simple outline of the curve which is so pleasing in Italian theatres? The



293.

Section of Académie de Musique, Paris. Scale 50 feet to 1 inch.

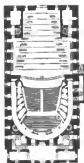
French alone seem to be of opinion that the introduction of pillars in this position is legitimate; and at Bordeaux, Marseilles, and other places they adhere to them, though other nations have abandoned the idea of anything so Classical in their theatres. Notwithstanding this, the house is much admired by those who frequent it for its acoustic properties, and also for the facility with which the stage can be seen; the latter quality is principally owing to the boxes being only partially instead of wholly closed, as is generally the case in Italian theatres and with us. Though why we should adopt so exclusive a principle is by no means clear, as it not only circumscribes the power of seeing but of being seen—the partial opening adding also immensely to the brilliant appearance of the house.

The Paris Opera House was commenced in 1820 under the direction of M. Debret, to replace an older house pulled down in consequence of the murder of the Duc de Berry in its vestibule in that year; and, as hinted above, is now about to give way to what is intended to be the most magnificent theatre in Europe.

So far as can be gleaned from such information as has been published, this new theatre will be 500 ft. long by 230 in extreme width, covering about 100,000 square feet, or twice and a half the extent of the Scala or any other similar structure in Europe; but as the auditory will not be very much larger than that of the present Opera House, and is only intended to accommodate 2000 persons—our large theatres contain 3000, the present house from 1500 to 1600—and as the stage cannot be very much extended, three-quarters of the whole block will be devoted to the accessaries; it might consequently be more appropriately called the Palace of Music than a theatre.

At Munich there is a very large and handsome Opera House, with five tiers of boxes, which are arranged on a perfectly circular plan, more apparently with reference to architectural effect than to the more important consideration that ought to guide an architect in designing a theatre. Externally it has the usual stereotyped plan adopted in Russia and frequently in France, of a great portico of pillars covering two stories of windows, with a block of plain masonry on either hand; the whole being unobjectionable, but useless and incongruous.

The Berlin Opera House was originally built by Frederick the Great, but has been entirely remodelled internally, and is now said to be one of the most comfortable houses in Europe for seeing and hearing in. It is very small, however, for, though it has a disproportionately large saloon, it does not altogether cover 20,000 ft., or half the dimensions of the Scala, and about one-fifth of that of the proposed new house in Paris.



291. Opera House,
Vienna.
Scale 100 feet to 1 inch.

The Opera House at Vienna, though small, possesses a peculiarity of plan worthy of remark. The auditory widens towards the stage, instead of contracting, as is usually the case. It is not quite clear if this could be carried out on a much larger scale; but in this instance it affords those persons at the side boxes a far better opportunity of seeing than in most theatres. It certainly seems to be an improvement, unless it is considered that the two, or, at the utmost, the three persons occupying the front seats are those only who are practically to be taken into account in the arrangement of a lyric theatre.

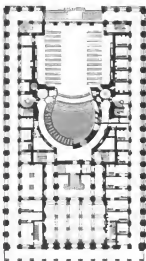
The result in this instance is said to be perfect, but on so small a scale it would perhaps be difficult to fail.

DRAMATIC THEATRES.

INTERNAL DIMENSIONS OF THE PRINCIPAL DRAMATIC THEATRES.

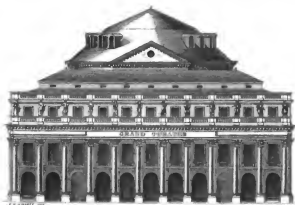
	Depth from Curtain to back of Boxes.	Width across Boxes.	Width of Curtain.	Depth of Stage.	Height over Pl.	Saloon.
	Feet.	Feet.	Feet.	Feet.	Feet.	Feet.
Versailles	77	65	45	82	56	25 × 70
Marseilles	76	65	38	50	52	25 × 48
Historique, Paris	70	65	35	42	..	..
Drury Lane, London ..	70	70	32	48	60	26 × 90
Hamburgh	70	67	40	65	58	..
Bordeaux	65	64	38	70	58	45 × 65
Mayence	65	60	33	46	50	..
Lyons	64	66	46	75	55	28 × 45
Berlin (Schinkel)	64	60	36	70	45	..
Antwerp	60	58	34	58	..	..
Carlsruhe	60	66	36	50	..	45 × 90
Italiens, Paris	60	65	36	46	55	30 × 60
Haymarket, London ..	57	48	25	33	..	..
Lyceum, ditto	55	52	35	40	47	..
Adelphi, ditto	51	56	33	47	..	..

The theatre at Bordeaux is certainly the most magnificent of its class in Europe, whether we consider its internal or external arrangement, though it is not so easy to decide whether or not these are always the most judicious or in the best taste. Its erection was commenced in the year 1773, from the design of Victor Louis, on the site of a citadel that had long commanded the city, and the removal of which was then determined upon. Owing, however, to difficulties and delays that occurred during the progress of the works, which nearly drove the unfortunate architect mad, the building was only completed in 1780. Its dimensions are very considerable, being 280 ft. long by 151 in width, and consequently covering nearly 42,000 ft., or more ground than the Scala at Milan; but of this great area a much smaller portion is occupied by the auditory and stage than is usual either in lyric or dramatic theatres.

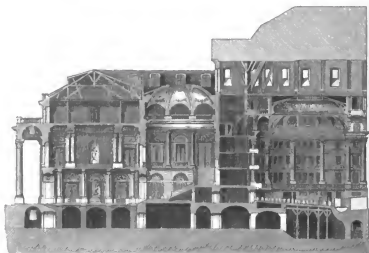


292. Plan of the Theatre at Bordeaux.
Scale 100 feet to 1 inch.

Except the Madeleine and the Bourse at Paris, there is perhaps no other building in France of the same size that carries out so completely the endeavour to look like a temple of the Romans as this one. In front there is a portico of twelve Corinthian pillars standing free; and on the flanks and rear the same Order is carried round in the form of pilasters attached to piers, but allowing of corridors of communication all round the building externally. The Order is 42 ft. in height, and is surmounted by an attic which rather detracts from its dignity, especially as it is again surmounted by the enormous and



293. Principal Façade of the Theatre at Bordeaux. Scale 50 feet to 1 inch.



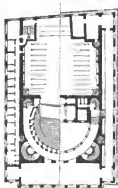
291. Section of the Auditorium of the Theatre at Bordeaux. Scale 50 feet to 1 inch.

crushing roof indispensable in a theatre. Perhaps it would have been better if the Order had been placed on a boldly-rusticated basement and the attic omitted; but every way it was an error to introduce the Order at all. It never could express the construction or the internal arrangements of the building, and, by preventing the introduction of more than three stories in height in any part, it introduces a degree of falsehood, accompanied by inconvenience, which more than counter-balance the pleasure derived from its magnificence.

Internally an Order has been introduced with almost equal prominence into the auditory, and with the same bad effect. It gives no doubt a Classical air to the whole interior, but the second and third tiers of boxes become balconies fixed to the pillars at a third and two-thirds of their height without any bracket or apparent support. The eye of the engineer is offended that so much useful sight should be obstructed, and the artist that the construction should not be accentuated and visible. Still, of its class, it is one of the grandest to be found anywhere; and if we must be Classical and modern at the same time, it will not be easy to find a more successful compromise than the Grand Theatre at Bordeaux.

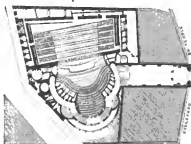
That at Lyons can by no means compete with the Bordeaux Theatre either in dimensions or in magnificence. Still it is a very fine building, and is interesting as being the first in which the present arrangement of the boxes was carried to perfection. It was commenced in 1754, from the design of the celebrated Soufflot, the architect of the Pantheon at Paris, and was considered so successful, both for hearing and seeing and being seen, that it became the type of all future theatres in France; and, with very slight alterations, the form then introduced continues to be followed in almost every new erection of this class.

This theatre fell into decay in the beginning of this century, and was reconstructed as it now stands between the years 1826 and 1831. The plan (Woodcut No. 295) shows the building as originally constructed by Sufflot, and, after all the experience we have had, it does not really seem that we have advanced much beyond the point where he left it. The whole is simply and economically arranged, all the parts well proportioned to one another and to the uses to which they are applied. The most remarkable peculiarity is, that it has a storey or saloon accessible to the public below the floor of the pit (as shown on the right-hand side of the plan), which certainly seems a convenience that would compensate the public for mounting some 15 ft. higher than they would have to do if it were omitted.



295. Theatre at Lyons, as originally constructed. Scale 100 feet to 1 inch.

Perhaps the theatre which deviates most from the stereotyped arrangement is the *Théâtre Historique*, erected in Paris in 1846. In this instance the auditory is neither an ellipse with its longer axis coincident with that of the stage, as usual in lyric theatres, nor a circle, as is generally the case in those devoted to the spoken drama, but an ellipse with its major axis at right angles to that of the stage. One immense advantage gained by this is, that all the audience sit facing the proscenium, and not sideways as is usual, and consequently see the performance with far more ease and comfort to themselves, though, it must be confessed, somewhat at the expense of the architectural effect of the auditory itself. The one question is, Can an equal number be accommodated by this arrangement as by the other? So far as experience has yet gone, it seems that they can; and, consequently, a tendency towards this form has been shown in some of the recent constructions both in France and in this country. In the *Théâtre Historique* the principal object aimed at was to obtain immense galleries to accommodate the



296. *Théâtre Historique*, Paris. Scale 100 ft. to 1 inch.

class of persons who lived in the neighbourhood of the Boulevard du Temple, in which it was situated. But if the pit were converted into first-class places—as hinted above might be the case—such an arrangement would seem singularly applicable to accommodate all classes appropriately.

Besides these public theatres, France possesses what no other nation has on anything like the same scale—a private theatre in the Palace of Versailles, which, though exceptional, is perhaps on that very account the more worthy of study. The great difference between it and those

we have been considering is, that it is no longer a question how to accommodate the greatest possible number: state and convenience have more to be considered than profit or loss. The consequence is, the pit is very circumscribed; but in the centre, instead of a Royal box, is a grand platform, on which the king and all his courtiers could sit and be admired, while the boxes are so arranged as to complete the picture, looking more towards the real king than towards him who only "struts his hour upon the stage."



297. Theatre at Versailles.
Scale 100 feet to 1 inch.

This theatre was not an original part of the palace as constructed by Mansard, but was constructed from the design of Gabriel in 1769, and restored in the reign of Louis Philippe in the manner represented in the Woodcut No. 298. Taken for what it is, it must certainly be considered as very successful; but still, where money was no object,

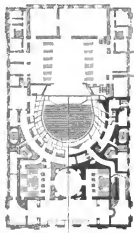
and the number of persons to be accommodated not necessarily taken into consideration, something less like a public theatre might have been thought of—something that would have looked more like the hall of a great palace, and less like what is seen in the neighbourhood of the Boulevard St. Martin.



298. Section of Theatre at Versailles. Scale 50 feet to 1 inch.

Since the destruction of Covent Garden we have only one first-class dramatic theatre in England—that of Drury Lane. Its dimensions are 135 ft. in width, and 240 in length, covering, consequently, some 32,000 ft., which, though not so large as Bordeaux and some others,

are still noble dimensions. The auditory is arranged on the circular plan, and, as there are very few closed boxes, the audience can see with tolerable facility what passes on the stage. The saloons and staircases are arranged with more dignity and on a larger scale than is likely to be again adopted in an English theatre, the class of people who frequent this part not being such as again to induce much outlay for their accommodation. This house holds conveniently some 3000 persons, which is about as large an audience as can well be present at any kind of dramatic representation in a modern theatre; and even then it can only be the grander class of tragedies or the stateliest comedies that are suitable to so large a building. All the lighter and more playful pieces are far better appreciated in smaller houses; and as these have become the most fashionable, it is not likely we shall again see houses built of these dimensions in this country.



239. Plan of Drury Lane Theatre.
Scale 100 feet to 1 inch.

Many of the smaller theatres in London, as well as in the provinces, show not only great skill in their arrangements, but also great taste in their decoration; but they are all so economically built as hardly to come within the class of architectural objects; and even if it were otherwise, the fact of their being all either built or having assumed their present form by the hands of living architects would prevent any more detailed criticism on their merits finding a place here.

The Germans have written a great deal about the best form of theatres, but, after a very long and angry polemic, they do not seem to have arrived at any conclusions differing very materially from those which the practical sense of other nations had arrived at before they brought their learning to bear on the subject. The one point which they seem to consider as a discovery is, that truth requires that the form of a theatre externally shall express the curve of the boxes internally. The consequence is, that Semper has adopted this form at Dresden, copying it from Moller, who had introduced it at Mayence in 1829, and it has been adopted elsewhere, though with some modifications. In this instance, however, the truth turns out to be falsehood, or, at least, pedantry, to a considerable extent. A Classical theatre which consisted only of one great cench of concentric gradini, with all its means of communication within the circle, could, in fact, be only so represented with truth on the exterior. But a modern theatre is a very different affair. The construction almost requires two staircases at the back of the boxes in the angles of the quadrants; there must be saloons and refreshment-rooms behind the boxes, offices and apartments on the sides. In fact, a rectangular plan fits far more easily to so complicated

done at Bordeaux; and, although the Orders here are used with more propriety and elegance, their introduction is equally a mistake, but, on the whole, perhaps more prejudicial to truthful Art in the German than in the French example.

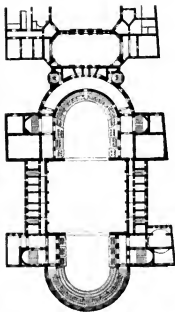
At Antwerp the architect of the theatre felt compelled by public opinion to adopt this form; but, like a reasonable architect, he inserted a square block of building between his external curvilinear arcade and the back of his boxes, and into this he put his staircases, saloons, &c., and so reconciled both theories.

But the whole is a mistake, and will hardly be repeated, so it is hardly worth insisting on.

The case is widely different with a new class of theatre which has recently been introduced in Germany, and might perhaps, with certain modifications, be made suitable to even our climate. These theatres are double. In the centre is the stage, of the usual dimensions, with wings for scenery, &c., but perfectly flat; at the side next the street is an auditory of the usual form and dimensions, with all the accompaniments and arrangements of ordinary theatres used for night performances, and is called the Winter Theatre. At the other end of the stage is an auditory of a very different character—ornamented so as to bear the light of day, lighted by large windows at the side or from the roof, and surrounded by arcades opening on a garden. This theatre, of course, can only be used in daylight, and practically only in summer, though, for morning concerts and minor performances, it might be used all the year round.

This really does look like an invention; and at a time when late dinner-hours and midnight company have driven the upper classes almost entirely from our theatres, some such expedient as this may restore its pre-eminence to the legitimate drama. There is no reason in the world why a play of Shakespeare's should not be as interesting if seen with fresh air and the blessed light of day as if seen in a close atmosphere by the glare of gas lamps. All pretence of immorality would be done away with by daylight, and so would nine-tenths of the stage-tricks which have so injured the real grandeur of the higher class of dramatic performances.

The manner in which this double arrangement has been carried out by Titz in the Victoria Theatre is as successful as anything of its sort

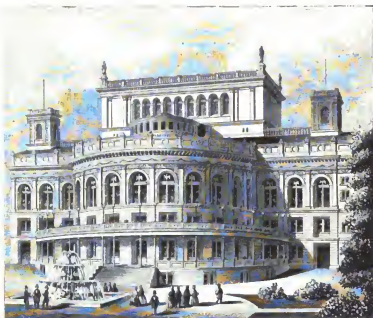


302.

Victoria Theatre, Berlin.
Scale 100 feet to 1 inch.

in Germany. The decoration is truthful throughout, and elegant at the same time; and the garden-front, for its dimensions and character, is as pleasing a design as any that has been recently carried into effect in that country.

In consequence of its double apse the dimensions of the building are considerable. It is 310 ft. in length, and about 140 in extreme breadth, covering about 32,000 square ft., or nearly the same area as our Drury Lane.



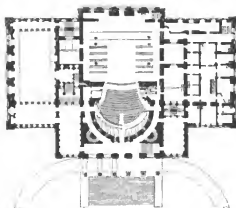
363.

View of the Summer Auditory of the Victoria Theatre, Berlin.

The only other theatre in Germany, that possesses anything so original as to be worthy of remark, is the so-called National Theatre at Berlin, commenced in 1819, from designs by the celebrated Schinkel, and finished in the following year. There is no theatre in Europe which can compare with its external ordinance, either for beauty or appropriateness, unless it be the Victoria Theatre just described.

The design (Woodcut No. 215) consists, first, of a podium or basement, rusticated, but in perfect proportion to the superstructure; above this are two ranges of *steles*, separating the building into two distinct and well defined stories, and admitting of any required amount of light being introduced into the interior, without any violence or falsehood. All may be open, or every alternate one filled in with a panel—any arrangement, in fact, may be adopted that is required for internal convenience. The angles are strongly accentuated by bold piers, and the flanks divided by similar masses into compartments, so that there

is no want of strength anywhere. The central compartment is raised considerably above the rest—not only breaking the outline pleasingly, and giving it dignity, but at once marking the character of the building. The only objectionable feature is a portico of six widely-spaced columns in the front, at the head of a very splendid flight of steps. These features are well designed, and beautiful in themselves, but the portico is seen to be useless; and as for the stairs, the entrance is not *up*, but *under* them; and a grand flight of steps that nobody is to ascend is about as ridiculous an object as can well be con-



304.

Plan of Schinkel's Theatre, Berlin.
Scale 100 feet to 1 inch.

ceived. Notwithstanding this one solecism, which was partly excusable from the situation of the church on the Gens-d'armes Place, between the two porticoed propylea of Frederick, this theatre may probably be considered as Schinkel's masterpiece, and certainly is the best adaptation of Greek Architecture to such a purpose that has yet been effected either in Germany or elsewhere. Internally the arrangements are by no means so successful. Convenience has been sacrificed to Classicality to a greater extent than even at Mayence; and though extensive alterations have been made since it was first opened, it is not either a comfortable theatre to sit in, nor well adapted for hearing distinctly what is passing on the stage.

The theatre which the same architect erected at Hamburgh is singularly plain and simple in its arrangements, both externally and internally; but from these very circumstances avoids many of the errors and inconveniences of its more ambitious rivals; and with a very little more ornament might be considered as successful as an architectural design as it is said to be as a playhouse.

On the whole the Germans can hardly be congratulated on their achievements in this department of Architectural Art. Their theatres want the elegance and appropriate cheerfulness which characterize those of France; they have not even the business-like adaptation to their purposes to be found in those of England; while they certainly are deficient in the simple unaffected grandeur of those of Italy. They seem, however, now to be entering on the task with a correcter appreciation of the conditions of the problem, and may yet do something of which they may hereafter be justly proud.

MUSIC HALLS.

The English are the only people who have hitherto erected halls or theatres specially for the performance of choral music, but that class of entertainment is now so great a favourite with the public that it promises to become an important institution with us. Already halls have been erected at Birmingham, Manchester, Liverpool, Leeds, Bradford, and other places; besides Exeter, St. James's, and St. Martin's Halls in the metropolis. All these, however, are much too small for the purpose, the largest of them being hardly capable of accommodating 2000 persons: whereas a chorus of 500 performers, with such a band as is usually found, for instance, in Exeter Hall, could just as easily be heard by 5000 persons in a properly-constructed building; and the increase of size would not prevent the solos being as well if not better heard by the same numbers; but if the building were really well arranged, 5000, or even 10,000, might hear as distinctly as 2000 do now.

All these halls have been constructed on the rudest possible principles: they are mere oblong rooms, sometimes with a gallery along the sides and in front, and generally with a flat floor. It is in fact the old Tennis Court arrangement which preceded the present theatres: yet, strange to say, when we build a lecture-room either in the Universities or our scientific institutions, we adopt almost literally the principles of the old Greek theatre; and we know perfectly well that what would make the spoken voice heard would also be suitable to the singing voice, only that the latter could be heard with equal distinctness at three or four times the distance. All that can really be said in favour of these halls is that they are much better suited for the purpose than the cathedrals in which these choral performances took place before their erection, but neither the one nor the other is at all worthy of the science of the present day, nor of the glorious class of performances to which they have been appropriated.

A very great advance has recently been made in our knowledge of this subject from the experience of the performances at the Crystal Palace. On several occasions there, from 15,000 to 20,000 persons have heard the choruses of Handel in a very perfect manner, and one-half that number have heard the solos with very enjoyable distinctness; yet the Crystal Palace is about the worst possible building, except in so far as size is concerned, for the purpose. The floor is perfectly flat; the galleries accommodate very few, but are thrust most obtrusively into the area, so as to hinder those under and behind them from hearing; all the arrangements of the auditory are of the most temporary and accidental character, and the external sounds very imperfectly shut off; yet the perfection with which the earlier opera concerts and the later oratorios have been heard in that building has surprised and delighted every one. If the same audiences were arranged in a building expressly constructed for the purpose, there can be no

doubt but that 20,000, or even more, could hear an oratorio with perfect distinctness.

It is to be hoped that something may be done in this direction, for not only have these great performances of choral music become almost national among us, but they approach more nearly to the great semi-sacred theatrical representations of the Greeks than anything else that we know of in modern times. If any one at the present time wished to realize what the Greeks felt in witnessing a grand performance of one of the dramas of Sophocles or Euripides, he would perhaps come nearer the truth by hearing one of the magnificently executed Oratorios of Handel or Haydn than by any other process available in modern times, and infinitely more nearly than by listening to an English translation of a Greek drama performed behind the gas lamps of a modern theatre.

BOOK XI.

CIVIL AND MILITARY ENGINEERING.

THE introduction of railways, and the immense consequent development of civil engineering, have given rise to a class of works which, if not strictly Architecture, are so closely allied to it that it is impossible to escape alluding to them in a work like this, though any attempt to describe them would be to commence a new volume, and to open out quite a different field of inquiry from that which has been followed out in the previous pages of this work.

Those who have mastered the definitions stated at length in the Introduction to this volume will have no difficulty in perceiving that there is no real line of demarcation between the two branches of the building profession, though now they are kept distinct as Engineers and as Architects; but if the latter were only as truthful and as living an art as the other, the distinction would entirely disappear. The Engineer would only be the Architect who occupied himself more especially with construction, and the more utilitarian class of works; the Architect, properly so called, would be the artist who attended to the ornamental distribution of buildings, and their decoration when erected.

At the present day the line of demarcation is easily recognised, because the engineer is a man who follows his branch of the profession on the same common-sense principles which guided builders in all previous ages. The architect has superadded those trammels of imitation which reduce his branch to an absurdity. The one great hope of a return to a better state of things is that the engineers may become so influential as to force the architects to adopt their principles, though at the present moment the tendency seems rather in the opposite direction.

As in consequence of these distinctions, however, the engineers are not architects within the definition of the term employed in the preceding pages of this volume, their works need not be enumerated here; but in order to complete and to render intelligible what has been said above, it may be expedient to select one or two examples which will suffice to point out the differences which exist, and the tendency of the two branches towards the unknown future.

There are of course certain branches of his profession in which the civil engineer does not come in contact with the architect, such as the laying out and making of roads, the making of the permanent way of railroads, the making of embankments or of piers, and similar works;

but most of these are now being handed over to the mechanical engineer, or to the surveyor and the contractor. The civil engineer, in the sense in which we are now speaking of him, is the builder of bridges and viaducts, the excavator of locks and docks, the constructor of piers and lighthouses, and frequently the builder of ships.

In all these cases the primary object of the engineer is use, not beauty; but he cannot help occasionally becoming an architect, and sometimes with singular success, though too frequently, when he ornaments, it is, as architects generally do, by borrowing features from the Classical or Mediæval styles, or by some mistaken idea betraying how little he has really studied the problem before him.

In illustration of these definitions, let us take the Dee Bridge at Chester. As an engineering work, nothing can be nobler: It is the largest single span for a stone bridge in England, probably in the world; built of the best materials, and in a situation where nothing interferes with its beauty or proportions. Its engineer, however, aspired to be architect; and the consequence is that, instead of giving value to an arch of 200 ft. span, no one can, by mere inspection, believe that it is more than half that width. In the first place he introduced a common architrave moulding round the arch, such as is usually employed in Domestic Architecture, and which it requires immense thought to exaggerate beyond the dimensions of a *porte-cochère*. He then placed in the spandrels a panel 30 ft. by 50, which in like manner we are accustomed to of one-third or one-thirtieth these dimensions. He then, on his abutments, introduced two niches for statues, which it is immediately assumed would be of life-size; and beyond this, two land-arches without mouldings or accentuation of any sort, consequently looking so weak as to satisfy the mind there was no difficulty in the construction.



306.

Dee Bridge at Chester.

Had Mr. Hartley been really an architect, he would have rusticated these land-arches with Cyclopean massiveness, not only to continue the idea of the embankment, but also to give strength where it was apparently most needed; and would have avoided anything in the abutments that savoured of life-size sculpture or of temple-building. A Mediæval architect would have pierced the spandrels with openings, thereby giving both lightness and dimensions to this part; or if that was not mechanically admissible, he would have divided it into three or four panels, in accordance with the construction. The essential parts in the construction of a bridge, however, are the *voussoirs* of the arch; and to this the architect's whole attention should first be turned. If there had been fifty well-defined arch-stones, the bridge would have

looked infinitely larger than it now appears. With one hundred it would have looked larger still; but if too numerous there is a danger of the structure losing that Megalithic character which is almost as essential as actual dimensions for greatness of effect. The true architect is the man who can weigh these various conditions one against the other, and strike a judicious balance between the different elements at his command. At Chester the builder has failed in this at every point, and by the same process which ruined St. Peter's. By exaggerating his details, the bridge has been dwarfed in exactly the same manner as the basilica.

If this is all that can be done with bridges, it is far better that they should be left, like most of those recently built, to tell their own tale without any ornament whatever. A long series of tall arches is so beautiful an object in itself that it is difficult to injure it; but occasionally a slight moulding at the impost, a bold accentuation of the arch, and bold marking of the roadway render these beautiful which otherwise may only be useful in appearance.

London Bridge is a very happy instance of Ornamental Engineering, but scarcely sufficiently ornamented to become Architecture; but in this respect it is better than Waterloo Bridge, where the Doric columns on the piers, though certainly ornamental, are so inappropriate as considerably to mar the effect.

Neither of the bridges of Telford or Stephenson across the Menai Strait makes the smallest pretension to architectural design. The former, however, though beautiful from the grace of its form, would have been even more so had the hand of taste been allowed to modify some of its details, but it is lucky in having escaped the Egyptian propylons in cast iron which were designed for the suspension bridge at Clifton. It must also be confessed he would have been a bold man who ventured to suggest a decoration for so untried a form as the tubular girder, and in the present state of design it is fortunate the attempt was not made. If not beautiful, it is grand, and there is no offence against good taste. The same can hardly be said of Brunel's two bridges at Chepstow and Saltash. In these the great bent tube is the principal feature, but in both instances the construction is wholly internal and concealed. It would have cost nothing, and hardly added a ton to the weight, to have put enough of it outside to explain the arrangement, and so satisfied the mind. Wonderful as the latter is from its size and position, and fairy-like from the lightness of its form, it can only now be looked upon as a glorious opportunity neglected for producing one of the most beautiful specimens of Iron Bridge Architecture in the world. With the requisite amount of taste and thought this might have been done, adding little or nothing to the expense.¹

¹ A bridge is now building over the Rhine, at Mayence, on the same principle, which will be infinitely more satisfactory, because the construction is all shown. Although it may

want the height and the poetry of that at Saltash, it is not only a better specimen of Engineering, but also of Engineering Architecture.

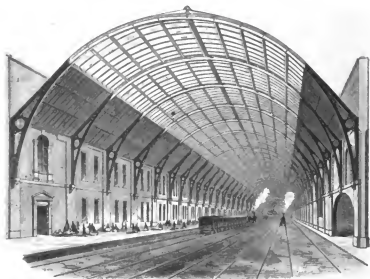
Among smaller objects, the lighthouses, such as those of Eddystone, Bell Rock, and Skerryvore, are the most satisfactory specimens of Engineering Architecture that have been produced. They have little or no ornament, it is true, but exquisite beauty of form with great perfection of material and workmanship; and if these do not entitle them to rank in the higher class, we must cut out of our list pyramids and obelisks, topes, tombs, and all the simpler, though some of the grandest, objects that have hitherto been classed with Architecture.

Some of the entrances to the tunnels which are found on most railways in England are as grand as any city gates, and grander than many triumphal arches, that are to be found in Europe. But this is only the case when they depend for expression on their own mass and dimensions, relieved only by a few simple but appropriate mouldings—when they, in fact, are treated according to the true principles of architectural design. Too often, however, the engineer has aspired to be an architect in the modern sense of the term, and there are Grecian, Egyptian, Gothic, and other tunnel-fronts on various lines which are as absurd as anything done in towns. They probably, however, are the exception. But a collection of these objects, classified as they belonged to the true or imitative styles of Art, would be as correct an illustration as could well be found of the two principles of design prevalent in ancient and in modern times, and a fair test of their relative excellence. In applying such a test, however, it must be borne in mind that those who have designed the true examples are men in a hurry, who probably in all their lives had never time to think of beauty in Art, while those who erect imitative buildings have generally spent their lives in intense study of ancient Art, and become thoroughly imbued with its spirit, in the hope that they may be able to reproduce its beauties.

The point, however, at which the engineer and the architect come most directly in contact is in the erection of stations and station-buildings. In every instance these ought to be handed over to the architect as soon as the engineer has arranged the mechanical details. Unfortunately, however, as Architecture is practised in this country, its professors, if so called in, would insist on the station being either Grecianized or Gothicized, or, at all events, carried out in some incongruous style; and not one man in ten would have the courage to content himself with ornamental arrangement of the parts and ornamental accentuation of the construction, these being all, or nearly all, that can be allowed in such cases, decoration being generally not only misapplied, but too costly for the purpose.

On the other hand, when engineers attempt decoration they generally fail. Nothing is so common as to see attenuated cast-iron Classical columns with a fragment of an entablature on their heads, spaced ten or twenty diameters apart, and supporting trussed wrought-iron girders 100 or 200 ft. in span, or, what is worse, pointed arches and cathedral details appropriated to a similar purpose.

To recapitulate what has been done in this direction would be to



316.

Interior of the Station at King's Cross.

write a volume on Civil Engineering; but an example or two may suffice to place the style in its proper relation to Architecture in the stricter sense of the word, and thus prevent confusion of ideas regarding a proper definition of Art.

The first example selected is the King's Cross Station, one of the noblest of those in the metropolis. It consists of two great halls each 800 ft. long, 105 ft. wide, and 91 ft. high. Westminster Hall is 258 ft. long, 68 ft. wide, and 86 ft. high; that at Padua 240 by 84 in width: so that neither of these, though the largest erected before this century, can compare in dimensions with the modern examples. Internally the Paduan example is not so architectural as the station, and need not be compared; but that at Westminster, if placed in juxtaposition, explains at once the difference between Civil Engineering and Artistic Architecture. Both the halls depend for their effect principally on their roofs. In the station the corbels are plain blocks, the ribs of the simplest form, and the quantity of timber exactly what was necessary to support the roof, and the castings and details are made wholly without reference to architectural effect. In the Hall, the corbels are rich, the timber twice the quantity required, the arrangement of the parts designed as much for architectural as for mechanical effect, and every part carefully carved and ornamented. Between these two there are infinite degrees, but no line. Had the architect of the station felt himself justified in spending a little more money, he might easily have added strength, or the appearance of it; he might have added ornament; he might have modified his proportions, or introduced parts that would have done so in appearance, till he made as



307

Exterior view of the Station at King's Cross.

beautiful an object as the Hall, and, considering the immensely increased dimensions, a far grander building; but this he was not permitted to do, and it would have required great judgment and an immense amount of thought to have done it well.

The internal façade of the buildings of this station, which ranges along the whole length of the departure platform on the west side, is another important feature, which, without additional expense, might have been made far more satisfactory by a slight expenditure of thought only. It now consists of a range of similar windows in the upper storey, and of doors and windows treated similarly below. An important entrance from the first-class booking-office—a less ornate one from the second—would have given meaning to one part. The offices ought to have been treated in one style, the refreshment and waiting-rooms in another; and these ought to have been different from the lamp-room, porters' room, and more menial buildings attached.

Externally the design has the merit of being entirely truthful. The two great semicircular windows terminate appropriately the two sheds; the clock-tower is a perfectly legitimate feature; the booking-office on the one hand, and the archway from the arrival platform on the other, are equally appropriate. The one great defect is, that the style is so simple and grand that it ought to have been executed in granite, while it is carried out in simple brick. Knowing this, the spectator cannot help feeling that those deep offsets round the arches are misplaced, especially as the lightness of the roof they terminate is seen through the windows. One or two would have been ample; and if the money saved in material had been employed in ornament, a more architectural



308.

Façade of Strasbourg Railway Station, Paris.

façade might have been attained, and one infinitely more appropriate to the material in which it is built.

If we turn back for one moment to Schinkel's design for the Bauschule (Woodcut No. 230) we shall see at once how this might have been done; and it may also be useful to note the difference between the two designs. At Berlin the details are all good and all appropriate to brick Architecture, but the form of the building is too simple and severe for such a material. At London the outline is sufficiently broken and varied for brick; but the details too massive and solid for anything but stone or granite. Had Schinkel used as broken an outline as that of the station, or had the station been ornamented with as elaborate details as the Bauschule, they would both have been more perfect buildings; but they both fail because their architects forgot to think of the materials they were about to employ.

Another illustration how such a façade might have been ornamented is seen from the next example taken from the Station of the Strasbourg Railway at Paris. Practically the design of the two façades is the same (except that there is only one shed in the French example); but the latter, from its higher degree of ornamentation and its more artistic arrangement, becomes really an object of Architectural Art, and one perfectly appropriate to the purpose, without too great an amount of imitative features borrowed from any particular style.

The Station at Newcastle, though very grand, and possessing some excellent points of design, verges close on the faults so common in the Renaissance styles. It is neither quite truthful nor quite appropriate. The great portico might as well be the entrance to a palace or a theatre as to a railway station, and the ornamentation has too much



309.

Façade of Station, Newcastle, with intended portico.

the character of being put there for ornament's sake alone, without reference either to construction or to any of the real exigencies of the building; and, what is worse, in order to give light to the rooms below, its roof must be either wholly or partially of glass, consequently, its monumental forms at once become absurd. They are such as would almost suffice for a vault—a few iron posts would do as well for all they have to support.

Without attempting to assign the relative merit of each of these three examples, they may be taken as representing the three classes into which this style divides itself: the first representing Engineering Architecture, the second Artists' Architecture, and the third Architects' Architecture.

From the two first alone can anything that is good or satisfactory ever be expected; and, if persevered in, they offer precisely the same chance of developing a new style as was afforded to the ecclesiastical builders of the Middle Ages; and if the engineers only appreciate the value of the principles on which they are perhaps unconsciously acting, they ought to insist on the same truth pervading all the buildings in their charge. If they do, they will render a service to the sister profession, the benefit of which will be incalculable.

Unfortunately this is not the view of the matter that has hitherto been taken, not only in this country, but more especially on the Continent, as we meet with Byzantine stations and Gothic stations of every degree and variety, but also Pompeian and Classic—even pure Grecian Doric stations—and every form of inappropriate blundering, and all to save a little thought and trouble on the part of the designers. But it may safely be asserted that these are all—without a single exception—good or satisfactory in the exact proportion in which it is difficult to name the style in which they are erected.

If railway engineers and railway architects, in this country at least, have not done all that might be expected of them to produce beauty as well as convenience in their works, there is this, at least, to be said

in their excuse, that all our railways are private commercial undertakings entered upon with a view to profit. If, therefore, the engineer can provide the necessary accommodation for 10,000*l.*, he is hardly justified in spending 11,000*l.* Though it is quite true that a certain amount of spaciousness and dignity does attract custom to a railway, it is only to a certain extent, and a subordinate is not justified in going beyond that without special sanction.

A more fatal cause hitherto has been the transition state in which everything is. Though railways are little more than thirty years old, there is hardly an important station in the country that has not been either pulled down and re-erected in some other locality, or enlarged and altered so that nothing of the original design remains; and any station that is twenty years old, either is, or ought to be, rebuilt immediately. Even bridges have to be widened or altered, and the next few years may introduce such changes that all that men are doing now may have to be re-done. While this is the case, it is wasteful to spend much money on permanent erections, and much expenditure of time or thought is hardly to be expected from an engineer or his assistant on what they feel convinced may be swept away before they themselves have done with it.

All that can be asked from the railway authorities under these circumstances is elegant appropriateness, and all will have every reason to be thankful if that saves us from Mediæval stations, Doric porticoes, Egyptian viaducts, and other absurdities of the sort, of which too many have already been perpetrated in this country. It will be well for us if engineers are confined for the future to this, and to this only, and prevented from indulging in those eccentricities which have hitherto marred so many noble works. It is far better that we should be content with plain, honest, solid, but useful erections, than that our buildings should be adorned on mistaken principles, which have hitherto been supposed to constitute the art of Architecture.

FERRO-VITREOUS ART.

A new style of Architecture was inaugurated together with the first Exhibition of 1851, which has had already a considerable effect on a certain class of designs, and promises to have a still greater influence in future.

There is, perhaps, no incident in the history of Architecture so felicitous as Sir Joseph Paxton's suggestion of a magnified conservatory to contain that great collection. At a time when men were puzzling themselves over domes to rival the Pantheon, or halls to surpass those of the Baths of Caracalla, it was wonderful that a man could be found to suggest a thing which had no other merit than being the best, and, indeed, the only thing then known which would answer the purpose; and a still more remarkable piece of good fortune that the commissioners had the courage to adopt it.

As first proposed, the Hyde Park Crystal Palace, though an admirable piece of Civil Engineering, had no claim to be considered

as an architectural design. Use, and use only, pervaded every arrangement, and it was not ornamented to such an extent as to elevate it into the class of Fine Arts. The subsequent introduction of the arched transept, with the consequent arrangements at each end and on each side, did much to bring it within that category; and a man must have had much more criticism than poetry in his composition, who could stand under its arch and among its trees by the side of the crystal fountain, and dare to suggest that it was not the most fairy-like production of Architectural Art that had yet been produced.

As re-erected at Sydenham, the building has far greater claims to rank among the important architectural objects of the world. In the first place, its dimensions are unsurpassed by those of any hall ever erected. Its internal area is four times that of St. Peter's at Rome, and ten times that of our St. Paul's. A second merit is that its construction is absolutely truthful throughout. Nothing is concealed, and nothing added for effect. In this respect it surpasses any Classical or Gothic building ever erected. A third is that it is ornamentally arranged. Nothing can well be better, or better subordinated, than the great and two minor transepts joined together by the circular roofs of the naves, and the whole arrangement is such as to produce the most pleasing effects both internally and externally.

Although therefore it possesses in a remarkable degree greatness of dimension—truthfulness of design—and ornamental arrangements—which are three of the great elements of architectural design, it is deficient in two others. It has not a sufficient amount of decoration about its parts to take it entirely out of the category of first-class engineering, and to make it entirely an object of Fine Art. But its greatest defect is, that it wants solidity, and that appearance of permanence and durability indispensable to make it really architectural in the strict meaning of the word. Whether this quality can ever be imparted to any building wholly composed of glass and iron is very questionable, though a great deal could be done in this direction that has been neglected at Sydenham, and no doubt would have been done had its builders not been hampered by the purchase of the Hyde Park building, which was avowedly designed for temporary purposes.

The only mode of really overcoming this defect will probably be by the introduction of a third material. Stone is not quite suitable for this purpose: it is too solid and too uniform. So the designers of the Paris Palais d'Industrie seem to have thought, for, instead of trying to amalgamate the two elements at their command, they were content to hide their crystal palace in an envelope of masonry, which would have served equally well for a picture gallery, a concert-room, or even for a palace. Nowhere is the internal arrangement of the building expressed or even suggested on the outside; and the consequence is, that, however beautiful either of the parts may be separately, the design is a failure as a whole.¹

¹ At Paris they seem to have found this such drawings as have reached this country out already, at least if we may judge from of a new Exhibition building about to be

Though stone therefore may be inappropriate, brick and terra-cotta may be employed with iron and glass with the very best effect. When so used the brickwork must be of the very best quality, so as to be pleasing in itself. Coloured bricks should be employed everywhere to give relief and lightness, and the mouldings must be designed especially for the places they are applied to.

If at Sydenham the whole of the lower storey in the garden front up to the floor-line had been of brickwork, it would have added very considerably to its monumental character. It would also have improved the design immensely if the angles of all the transepts had been brickwork up to their whole height, and the screen-walls to a certain extent. This would no doubt have added somewhat to the expense, but not to a greater extent than would have been saved in repairs; and where the roof is of glass, there is no inconvenience in blocking out a certain portion of the lateral light. The real difficulty in adopting such a mode of treatment is the immense amount of thought it would require to work out the details, and the skill and judgment necessary to do it well. If well done it would almost be equivalent to the invention of a new style, and for certain purposes more beautiful than anything that has gone before.

Such a style would not, of course, be applicable everywhere; but there are so many buildings of this class now wanted for exhibitions, for railway stations, for places of assembly, and for floricultural purposes, that it is of great importance the subject should be studied carefully, as it is one of the few branches of the art on which a future of progress seems to be dawning. If such a development were to take place in even one of the most insignificant branches of the art, men would not long remain content to spend their money on even the correctest Classic columns or Gothic arches; once they perceived that these were not only absolutely useless, but actually hurtful, it might even come to be believed that the men of the nineteenth century practically knew as much of scientific construction, and were as refined in their artistic tastes, as our ignorant and hard-fisted forefathers in the thirteenth. When this is once done the battle is gained, and Architecture again becomes a truthful art and recovers the place from which she has been banished for centuries.

MILITARY ENGINEERING.

Military Engineering is another branch of the art which has even more rarely been brought in modern times within the domain of the architect than the civil branch has been, and has not some of its excuses: for all works of fortification are imperial works, paid for by the nation,

erected at Auteuil. In this design stone is to be used everywhere for accentuation, but never for concealment. Brick would probably have been better; but if the same taste is displayed in this building as is usual in

Parisian designs, it will be an immense step in the right direction, and go far to bring the ferro-vitreous style within the domain of Architecture.

and constructed without reference to profit; they might therefore be made ornamental, when ornament can be applied. The excuse is, of course, that there is no cosmoclast like a cannon-ball, and it is absurd to ornament what is sure to be destroyed. This is, however, hardly a fair view of the case: of one hundred bastions that are built, not more than one on an average is ever fired at, and it is a pity that the remaining ninety-nine should disfigure the earth during the whole period of their existence. The masses are so great and the forms so generally pleasing, that a very slight additional expense and small amount of thought would render that beautiful which now is commonplace, and this without interfering in the smallest possible degree with its defensive qualities. The truth of the matter is that the civilian or the architect is never consulted in these matters. A fortification is always a secret and a mystery till it is built; and the officer employed has probably never thought of Architecture as an art, and is too much occupied by the defensive elements of his design to think of anything else; while military boards are not—it must be admitted—likely to encourage their subordinates in carrying out their artistic aspirations.

It is hardly necessary to recall here the extreme beauty attained by Military Engineering in the Middle Ages. The grandeur of the donjon keeps—the variety and picturesqueness of the outer walls, with their flanking machicolated towers—the town wall with the gates—every part of the system was as admirable and as perfect as the Ecclesiastical styles of the day. With the invention of gunpowder these things were changed. The masonry came to be pared down to a moderate height, and was buried in a ditch instead of being perched on a crag. It was crowned with an earthen parapet instead of a cornice-like battlement. The gates alone were left, for some time at least, in the hands of the architects, and still remain the only part of a fortified enceinte to which decoration is systematically applied.

If San Michele was not the actual inventor of the pentagonal bastion, he was certainly the first man that reduced the modern systems to a practical shape; and though the forms he employed have been slightly modified and enlarged since his day, nothing has been added to what he invented till the bastion system itself was superseded by the modern polygonal fortification.

His greatest work was the fortifications of Verona, and the gates he erected there have been the models followed with more or less exactness in every subsequent fortification in Europe. One of these, now called the Porta Stupa from its being closed, has been quoted as his greatest work of this class; but it certainly is not so beautiful as that of the Castello del Lido (Woodcut No. 310), which for a single archway is one of the happiest designs of its class yet executed. In almost all cases the elements of these designs are the same—boldly rusticated Doric columns, with rusticated arches between, combined in various proportions. The French, who have more taste in these matters than other nations, have latterly omitted the pillars and introduced simple rusticated arches: elegant, it must be confessed, and appropriate,



310.

Gateway at Castello del Lido, Venice.

but generally so plain that they must be considered as belonging to Engineering rather than to Architectural Art.

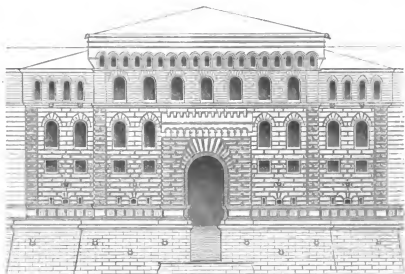
During the seventeenth and eighteenth centuries some hundreds of these great city portals were erected in various parts of Europe: all of grand dimensions—all more or less ornamented; but it is sad to think there is not one of them whose design the mind dwells on with pleasure, or which any one would care to see illustrated in a work like this.

If, therefore, we must abandon the portals, there is still an infinite number of works about an extensive fortress, all of which are capable of artistic treatment. There are towers in the gorges; there are casemates and defensive barracks, buildings of the most imposing dimensions and most massive construction, which it would require very little to render architecturally beautiful; and there are numberless minor objects which need not be left in their present state of utilitarian ugliness.

One example must suffice: at New Georgiesk or Modlin there is a granary situated on a point where the Bug and Vistula meet. Standing in the centre of so important a fortress, it was necessary to fortify it. This has been done by introducing a set of gun-casemates on the lower floor, a projecting gallery above, and rendering the whole bomb-proof. The style chosen is elegant; and without one single feature that can be called inappropriate, an edifice of very considerable architectural merit has been produced out of the granary of a fortress, and there is no building in the world that might not be made equally so if the same amount of care and pains were bestowed upon it.¹

In Germany something has been done of late years to remedy this state of things, especially by the late King of Bavaria at Ingoldstadt and elsewhere in his dominions. Some of the Prussian designs, too,

¹ The building is 550 ft. long by 100 ft. high in the centre.



311.

Central compartment of the Granary at Modlin.

show a tendency to consider how a certain amount of architectural design can be superinduced on the utilitarian forms of these buildings, and sometimes with very considerable success. As before mentioned, the arsenal at Vienna is one of the most successful of Austrian designs, but, being neither fortified nor in a fortress, it belongs more to the province of the civil than of the military branch. What might be done in this branch is obvious enough; but, till some greater progress has been made than has hitherto been effected, it is evident that military construction has as yet no place in a work devoted to the study of Architecture considered as one of the Fine Arts.



312.

Diagram showing the whole of the Façade of the Granary at Modlin.

CONCLUSION.

ON reviewing the history of Architecture during the three or four centuries to which the contents of this volume extend, the retrospect, it must be confessed, is sufficiently melancholy and discouraging. For the first time in history the most civilized nations of the world have agreed to forsake the only path that could lead to progress or perfection in the "Master Art," and been wandering after shadows that constantly elude their grasp. When we consider the extent to which building operations have been carried during that period, the amount of wealth lavished on architectural decoration, and the amount of skill and knowledge available for its direction, it is very sad to think that all should have been comparatively wasted in consequence of the system on which these were employed. Few will dispute the assertion that there is no Renaissance example equal as a work of Art to any Gothic or Saracenic building, or that ever attained to the picturesque appropriateness of these styles. Nor has any modern design ever reached the intellectual elegance of the Greek or Roman or the sublimity of the Egyptian; and all this simply because of the mistaken idea that success could be achieved without thought, and that the past could be reproduced in the present.

It is of little use, however, now lamenting over opportunities that have been lost and cannot be recalled: it is more important to try and find out what are the prospects of improvement now, or rather, before proceeding to this, to ask what is to be the style of the future?

To give a distinct and categorical answer to such a question is of course, impossible, as it would be equivalent to attempting to foresee what has not been invented, and to describe what does not yet exist. It would have been as reasonable to have asked Watt to describe the engines of the 'Warrior,' or Stephenson to sketch the appearance of the Great Western express train at the time when he started the 'Experiment' on the Stockton and Darlington line. If the style is to be a true style, it will take many years to elaborate, and many minds must be employed in the task; but if men once settle into the true path, success must follow, and the new style must be good and beautiful, perhaps more so than any that have preceded it. In the mean while, however, it is easy to reply negatively that it certainly will not be Gothic—if for no other reason, at least for this: that the Mediæval is a complete and perfect style, and progress in it is consequently impossible without a recurrence of the circumstances in which it was created. It was the result of centuries of continuous progressive changes growing out of the wants of the times, and supplied by the restless mental activity

of thousands of minds applied through long ages to meet these exigencies. We are separated by the gulf of centuries from these times: we can neither go back to nor recall them: we can never settle again into the same groove, and, while this is so, progress in that direction is impossible. If we could forget the invention of gunpowder, and induce nations to revert to bows and arrows and plate armour,—if we could ignore the printing-press and all its thousand influences, or persuade ourselves to believe that the steam-engine is still only the dream of some crack-brained mechanic,—then indeed we might restore the Middle Ages, and Gothic Architecture might become again a living form in such a state of things; but, till all this and more is done, it must remain only a fragment of the past, utterly strange and uncongenial to our habits and our feelings—an amusement to the learned, but taking no root among the masses nor ever being an essential part of our civilization. On the other hand, the more we study the Architecture of the past or become familiar with its details, the more enamoured must we be with so honest and so earnest an expression of human wants and feelings, and the more incapable are we of emancipating ourselves from its particular influence. This we already feel; and every day we are becoming more and more correct as copyists, and more and more intolerant of any deviation from the exact types of the Middle Ages.

The same is true of the pure Classical styles, from which we are separated by even a longer interval of time and also by a geographical barrier which renders them unsuitable for our climate. But it is not quite correct to say that our sympathies are not equally engaged by them. The educated classes, at least, know more and feel more for the age of Ictinus than for that of William of Sons, and are more capable of appreciating that of Vitruvius than that of Wickham or of Waynflete. But be this as it may, the Classical is also a perfect style, and progress in it is unattainable unless we can put ourselves in the position of the Greeks or Romans when they were elaborating it, and without progress it is impossible to adapt any art really to our use or purposes.

It need hardly be added that all this is even more true as regards the Saracenic, the Indian, the Chinese, or Mexican; but there is yet one other style within whose limits progress still seems possible. The Renaissance Italian is by no means worked out or perfected, and, from the causes pointed out in the preceding pages, has hardly yet had even a fair trial of its merits.

Originally it was a compromise between the Gothic and the Classic styles, borrowing the forms from the one, the details from the other; and it has in its progress oscillated backwards and forwards, from almost pure Mediævalism on the one hand to pure Paganism on the other, while in its devious course it has been adapted to nearly all the wants and exigencies of modern times.

Within the limits of such a style as this progress seems possible; and if it is, the problem is of easy solution. It does not require a man or set of men, as some have supposed, to invent a new style;

the great want now is self-control and self-negation. What we require is that architects shall have the moral courage to refrain from borrowing, and be content to think, to work, and to improve bit by bit what they have got. If some artistic Chancellor of the Exchequer would only lay a heavy tax on every Classic column erected after this date, and assess equally every mullioned window or every Gothic pinnacle employed in future buildings, we should soon arrive at a better state of things.

The demand, however, must arise with the public, and cannot come from the profession. We have no right to ask that an architect shall starve because he refuses to erect Gothic churches, Grecian temples, or Chinese summer-houses, feeling that he can do better. The public must say to those it employs, You shall arrange your design according to the dictates of common sense, you shall elaborate it by thought, and you shall apply ornament with taste to what you have thus worked out; but beyond these three postulates you shall not go. When this is done we shall again know what the art means. If we ask for anything else we may get something which may be very beautiful, but it will not be Architecture.

The real question lies somewhat deeper. Are we prepared to give up the idea that we are, or may be, intellectual Greeks or world-conquering Romans? are we ready to abandon the feeling that we are powerful Mediaeval priests or chivalrous knights-errant? are we, in fact, prepared to forego all our dreams of the past, and be content to acknowledge ourselves as only human beings living in the latter half of the nineteenth century, looking forward to and hoping in the future? We have done so in Literature, we are doing this in Painting, Sculpture seems tending towards the same course, and why not Architecture? More than this, the principles of common sense have been adopted by the engineers, who form one-half of the building profession. They are too young as a body, and have as yet had too little time to think, to know exactly what course they intend in future to pursue; but once that they have leisure and organization, it remains to be seen whether they will have sufficient influence to force the architects to adopt their principles, or whether the vanity of imitating the older and more artistic branch of their profession may not induce them to rest content with their lazy but aristocratic system of copying. Fine Art is a hard task-mistress, and to obtain her rewards men must work, and think, and exercise infinite self-control. False Art is an easy, smiling dame, whose favours are readily dispensed, but worthless when obtained. There is, in fact, no difficulty in finding the path by which perfection may be attained; the one question is, Have we the courage to choose it, and, having chosen, have we the perseverance necessary to reach the goal?

Although Architecture never was in so false a position in this country since the Reformation as it is at this moment, or practised on such entirely mistaken principles, still there are signs that encourage a hope that better days are dawning and may again

hrighten into sunshine. At no period during the last three centuries have the public taken the same interest in Architectural Art or felt so much desire to enjoy its beauties. As a body the Architects of this country have never been so numerous, so well instructed, or so earnest in the exercise of their vocation as at present, while recent experience is not likely to encourage the employment of amateurs, who learn all the secrets of the art without work, and can design anything without thought.

What is wanted to ensure progress towards perfection is, first, that we shall have a public with feeling enough for the art to desire it, and with knowledge sufficient to judge of what is good and beautiful; a body of architects so intelligent as to be able to grasp the condition of the problem, and with taste enough to design the requisite forms of expression; a class of builders with skill to arrange and energy to carry out what has been so designed; and, more perhaps than any of these, a class of art workmen so instructed and so expert that they shall be able to understand the work they have in hand, and so skilled as to be able to execute it thoughtfully and well. Many of these elements we already possess, and are progressing towards the attainment of the rest. But even all these will be of no avail unless every class is thoroughly imbued with a conviction that Architecture is neither more nor less than a true and progressive development of a useful art into a fine art, but which can never throw off its connection with its parent, nor can ever be practised on any other principles than those which alone have led to the elaboration of other useful arts into their æsthetic developments.

In addition to this, it is indispensable that the public mind should be thoroughly disabused of the idea that Archaeology is Architecture, or has, in fact, any direct connection with it. It never was so when Art was a living thing, and there is no logical reason why it should be so now. Once this error is exploded, and we really set in earnest to elaborate Building with truth into Architecture, there seems no reason why we should not surpass all that has been done up to this time. We have more wealth, more mechanical skill, more refinement than any nation, except perhaps the Greeks; and taste (even if not innate) may result from the immense extent of our knowledge.

APPENDIX.

ETHNOLOGY FROM AN ARCHITECTURAL POINT OF VIEW.¹

INTRODUCTION.

SECTION I.

ETHNOLOGY, though one of the youngest, is perhaps neither the least beautiful nor the least attractive of that fair sisterhood of sciences, whose birth has rewarded the patient industry and inflexible love of truth which characterise the philosophy of the present day. It takes up the history of the world at the point where it is left by its elder sister Geology, and, following the same line of argument, strives to reduce to the same scientific mode of expression the apparent chaos of facts which have hitherto been looked upon as inexplicable by the general observer.

It is only within the limits of the present century that Geology was rescued from the dreams of cataclysms and convulsions which formed the staple of the science in the last century; and that step by step, by slow degrees, rocks have been classified, and phenomena explained. All that picturesque wildness with which the materials seemed at first sight to be distributed over the world's surface has been reduced to order, and they now lie arranged as clearly and as certainly in the mind of a geologist, as if they had been squared by the tool of a mason, and placed in order by the hand of a mechanic. So it is with Ethnology. Race has succeeded race;—all have been disturbed, some obliterated—many contorted—and sometimes the older, apparently, superimposed upon the newer. All at first sight is chaos and confusion,

¹ The following sketch was originally intended to form part of the Introduction to the 'Handbook of Architecture.' The form which that work ultimately took rendered it inapplicable for that purpose, and it was therefore suppressed at the time. It is now printed as an Appendix to this volume, not because it has any very direct application to its contents, but in order to direct attention to what its author conceives to be not only the principal—but almost the only—circumstance which renders the study of the history of Architecture worthy

of the attention of the man of science or of intellect.

It is scarcely necessary to explain that the subject is so extensive it would take far more space than can here be devoted to it to treat it properly, and that in consequence, in order to be as brief as possible, a great deal is asserted in such a manner as to appear mere dogmatism. The proofs were intended to be contained in the History, and shall yet appear there if that work is ever remodelled to the extent to which its author would wish to see it modified and improved.

and it seems almost hopeless to attempt to unravel the mysteries of the long-forgotten past. It is true, nevertheless, in Ethnology, as in the sister science, that no change on the world's surface has taken place without leaving its mark. A race may be obliterated, or only crop up at the edge of some great basin of population; but it has left its traces, either as its fossil remains in the shape of buildings or works, or impressed on those who supplanted the perishing race; and when these are read,—when all the phenomena are gathered together and classified,—we find the same perfection of order, the same beautiful simplicity of law pervading the same complex variety of results, which characterise all the phenomena of nature, and the knowledge of which is the highest reward of intellectual exertion.

Language has hitherto been the great implement of analysis which has been employed to elucidate the affiliation of races; and the present state of the science may be said to be almost entirely due to the acumen and industry of learned linguists. Physiology has lent her aid; but the objects offered for her examination are so few, especially in remote ages, and the individual differences are so small, as compared with the general resemblance, that, in the present state of that science, its aid has not been of the importance which it may fairly be expected hereafter to assume. In both sciences History plays an important part: in Geology, by furnishing analogies without which it would be hardly possible to interpret the facts; in Ethnology, by pointing out the direction in which inquiries should be made, and by guiding and controlling the conclusions which may have been arrived at. With the assistance of these sciences, Ethnologists have accomplished a great deal, and may do more; but Ethnology, based merely on Language and Physiology, is like Geology based only on Mineralogy and Chemistry. Without Paleontology, that science would never have assumed the importance or reached the perfection to which it has now attained; and Ethnology will never take the place which it is really entitled to, till its results are checked, and its conclusions elucidated, by the science of Archaeology. Without the aid and vivifying influence derived from the study of fossil remains, Geology would lose half its value, and more than half its interest. It may be interesting to the man of science to know what rock is superimposed upon another, and how and in what relative periods these changes occurred; but it is far more interesting to watch the dawn of life on this globe, and to trace its development into the present teeming stage of existence.

So it will be when, with the aid of Archaeology, Ethnologists are able to identify the various strata in which mankind have been distributed; to fix identities of race from similarities of Art; and to read the history of the past from the unconscious testimony of material remains. When properly studied and understood, there is no language so clear, or whose testimony is so undoubted, as that of those petrified thoughts and feelings which men have left engraved on the walls of their temples, or buried with them in the chambers of their tombs. Unconsciously expressed, but imperishably written, they are there to this hour. Any one who likes may read, and no one who can translate

them can for one moment doubt but that they are the best, and frequently the only, record that remains of bygone races.

It is not difficult to explain why Archaeology has not hitherto been considered by Ethnographers of that importance to their researches to which it is undoubtedly entitled. We live in an age when all Art is a chaos of copying and confusion; we are daily masquerading in the costume of every nation of the earth, ancient and modern, and are unable to realize that these dresses in which we deck ourselves were once realities. Because Architecture, since the Reformation in the sixteenth century, has in Europe been a mere *hortus siccus* of dried specimens of the art of all countries and of all ages, we cannot feel that, before that time, Art was earnest and progressive; and that men did what they felt to be best and most appropriate, with the same certainty with which Nature works; and, though in an infinitely lower grade, we may reason of the works of man before a given date, with the same certainty with which we can reason of those of Nature. When this great fact is once recognised—and it is indisputable—Archæology and Palæontology take their places side by side, as the guiding and vivifying elements in the sister sciences of Ethnology and Geology; and give to each of these a value they could never otherwise attain.

As may well be expected, when Archaeology is employed to aid in these researches, results are frequently arrived at, which at first sight are discrepant from those to which the study of language alone has hitherto led scientific men. But this is no proof either of the truth or falsehood of the conclusions arrived at, or of the value or worthlessness of the processes employed. Both are essential to the elucidation of the subject, and it is by a skilful balancing of both classes of evidence that truth is ultimately arrived at.

To take an example. In France, one language is spoken from the shores of the Mediterranean to the frontiers of Belgium, and from the Rhine to the Atlantic Ocean. In another century of such progress as France has recently made, the fusion will be complete, and a traveller would be unable to detect from speech alone that Alsace and Lorraine are nearly purely German; Brittany, Celtic—that a northern tribe were once located in Normandy—that the Franks form so important an element in the population of Central France—and that there was once a marked and real distinction between the races speaking the *Langue d'Oc* and those who spoke the *Langue d'Oïl*. It is true these changes have taken place in our own age, and we have data from which we can trace them back to their source; but if we came on the Italian, Spanish, or French languages with the same abruptness with which we come on the old Latin or Greek tongues, or the old Semitic and Aryan languages further east, we should be justified in asserting that all the west and south of Europe was peopled by one race, and that there was no real distinction of blood among them.

On the other hand, but for Archaeology we should hardly know that the Pelasgi and Etruscans were of a race not only absolutely distinct

from that of the Greeks and Romans, but were far more nearly allied to the Turanian or Semitic races; while, notwithstanding all the obliteration that has taken place, an accomplished archaeologist, without knowing one word of the language, might, in France, tell at a glance who were the original inhabitants of every province or district, and might predicate infallibly whether their affinities were with Spain or Lombardy, with Bavaria or Westphalia, or whether anywhere Scandinavian blood tempered the Celtic excitability of the race. So, too, in this country, the Celtic language is dying out far faster than the Celtic race; Cornish has perished entirely as a spoken tongue, though the people remain what they were; Manx is fast dying out; and Gaelic and Erse are far from being co-extensive with the population who boast of Celtic blood; and at the present rate of the progress of education may, in a century or two, cease to be spoken as completely as Cornish. Everywhere, however, these races have left in their works unremoveable and unchangeable records of their existence; and though they may have been absorbed by more powerful races, and their language obliterated, their fossil remains still mark the places which they once inhabited, and recall to us the memories of what would otherwise be for ever mysterious or unknown.

The researches of the Ethnographer were met at the outset with the same misunderstanding which formerly encumbered the path of Geology. It was assumed that the truth of the Bible record was involved in the question whether all mankind were derived from one parent, or were simultaneous creations, or successive developments caused by the direct interference of an external guiding power.

The science is not at present sufficiently advanced to give anything like a satisfactory answer to either of these postulates; and it might perhaps therefore be safer and more philosophical to be content with the assumption that, at the earliest dawn of history, mankind were separated into the well-defined groups in which we now find them, without inquiring whether they acquired that distinction by creation or development. But as the human mind will hardly be satisfied with so negative a result, it becomes necessary to choose one among them. It may be safely asserted that there is not a shadow of proof, nor any fact that would lead us to conclude that separate acts of the Divine Will were requisite to produce the varieties we find. On the other hand, if we adopt the theory that all descended from one pair, we seem to be at variance with the literal meaning of the Pentateuch—if for no other reason than this one—that on the earliest monuments of the Egyptians we find the negro, the red man, the white man—all the varieties we now know—as clearly defined and as distinctly marked three or four thousand years ago, as we find them at the present time. The conclusion seems inevitable, that, if so long ago the offspring of one pair were developed into such distinct varieties, and no change has taken place during the long period that has since intervened, it must have taken a very long period of time to give them these forms, and to fix these characteristics so indelibly that

they are now exactly what they then were; but if this time is granted, there are no facts that the development from one parent will not explain.

The theory of successive or simultaneous creations of mankind may safely be put on one side till some fact is adduced which would render it probable, or some logical train of reasoning enunciated in support of its claims. As this has not yet been done, it will, at all events, be safer to assume as a fact that all mankind proceeded from one pair, admitting, however, at the same time, that, in a philosophical point of view, this is only to be treated as an hypothesis, in order to explain the phenomena, as in the present state of the science we have no direct proof of its being so.

All that is required on this hypothesis is a sufficient amount of time to allow such variations as have taken place to become fixed and indelible, and there is no further difficulty to be encountered; but if we adopt this view, it seems also necessary to assume that man was created only "a little lower than the angels," more beautiful in form than has since been seen, as perfect in all his faculties, as complete in intellectual development, and possessing a language probably as complete and as exquisite in its structure as any dialect we now know of.

In the struggle of life it is hardly possible but that these higher qualities should deteriorate, even in the most favoured climate and under the most favourable circumstances; but they would be retained to at least some extent, while the human family remained together in their original seat. When too numerous, this theory assumes that the first horde would be thrown off, or even single families might be separated by accidents, or because of offences; and, being sparsely scattered over the wide uncultivated world, would become hunters and fishers, and as such soon lose their primitive perfection, and a ruder and more syllabic language would soon suffice for their simple wants.

The next swarms or families going forth into a partially-known and inhabited world, might assume the character of shepherds—nomadic, but still in groups—and would not sink so low as those who went before. The third migration would, from these causes, retain a higher degree of civilization, and assume the status of agriculturists; and it is only the last who would carry from their native abodes the primitive language in anything like its purity, and disseminate throughout the world those arts and that philosophy which they had, to a certain extent at least, retained among themselves.

The above can hardly be called more than a hypothesis, but it has at least the merit of accounting for all the known facts of the case. The opposite theory, that the savage gradually has become developed into the civilized man, has not, so far as observation goes, been confirmed in any instance. We have innumerable proofs of men exposed to want and misery sinking in the scale of being; but the instances of the opposite course, when examined, seem all to be superficial, and not real cases of essential improvement.

It is only necessary to assume further, that the original seat of

mankind was in Central Asia, and somewhat between Balkh and Bokhara, and that the original colony remained there till they were driven out by a reflux of the great wave of population, by some one of the hordes that had been thrown off at an earlier period.

With these postulates, we have a theory that accounts for at least all the facts at present known. If this is so, this last remnant of the original family could not be other than the great Sanscrit-speaking race, who, we have reason to believe, were forced to migrate into India some 3000 years B.C., and have left in their original seat a less pure, but cognate, race, who now occupy it.

The earlier races would be the Semites or Celts, whom we never know as savages, nor descending below the status of agriculturists, nor indeed as very different from what we now find them. Before they left the parent seat the Turanians must have wandered forth; and perhaps even before them some of those savage tribes which are scattered in groups in various corners of the world. It has been found to be extremely difficult to classify these last, principally because, living apart and without literature, the language of every tribe soon becomes distinct, and so different from all others as to defy classification. It thus happens that two savage tribes who sprang from one parent not a thousand years ago, may now be speaking totally distinct tongues, and this without any external admixture of race or language with any other people in their proximity.

These, like the speculative suggestion of a separate creation of races at different times and places, may be at best mere hypotheses; but something of the sort seems indispensable to bridge over the gulf that yawns beyond the legitimate limits of history, and the great epoch of creation of man. All we can now do is to assume the more probable hypothesis, in order to direct our investigation towards its elucidation. In our present state of knowledge, that theory which contemplates the creation of one perfect pair at a very remote period, seems to be, even on purely philosophical grounds, by far the most probable of all the suggestions yet offered.

SECTION II.

It is not a little remarkable, although the Orientals early grasped the significance of the facts, and distinguished between the races of mankind, that the Greeks and Romans never seem to have had knowledge sufficient to attempt any classification of the sort. They were content to consider themselves as the salt of the earth, and to relegate all others into the category of barbarians.

We scarcely know at how early a period it was that the Persians adopted the classification of all mankind into the two great typical races of Iran and Turan; by the former meaning those who spoke Sanscrit or cognate languages, lately described as the Indo-Germanic people, the other comprehending all the tribes of Mongolian or Tartar origin. If we adopt the hypothesis above enunciated, the latter must comprise all those who emigrated at any early period from the native

seats of the human race; the former those who remained till dispersed by some great revolution of which we know but little.

To this great bipartite division the Pentateuch adds a third, as the descendants of Shem; and in this the Jews were perfectly justified. So far at least as the historical period is concerned, the Semitic races form a perfectly well-defined group, easily distinguished from those of the Turanian, whom they described as the descendants of Ham, and from the Aryans, known in their cosmogony as the descendants of Japhet.

Modern researches have not in any way tended to invalidate this classification, nor have they added much to the grand ethnographic sketch of the races of mankind contained in the 10th chapter of Genesis. There may be small outlying patches of humanity that it is difficult to find a place for in any of these three great divisions, but on the whole they describe the great prominent varieties with sufficient distinctness for all ordinary scientific purposes.

The Celtic is the only other race of mankind which has played a sufficiently important part in the world's history, and remained so distinct as to merit a niche for itself. Philologists have ascertained that the language the Celts now speak is closely allied to that of the pure Aryans; but in the same manner it is said that the Semitic languages are akin to that of the Turanian. If ethnographers are justified in asserting—as some have done—that the Semitic are only developed races of Hamitic or Turanian origin, it may in like manner be said that the Celts are undeveloped Aryans; or, in the language of the hypotheses stated above, the Turanian left the parent seat of the race first, then the Semitic, and soon after these the Celtic, leaving the Aryans to the last; and our classification would thus be,—

TURANIAN.

SEMITES. — CELTS.

ARYANS.

It may be true that the linguistic affinities of these races do not bear out this classification in all its extent. But both History and Archeology point to these as the four distinct and typical races of the old world, and intellectually and artistically they certainly always stood in the relation here pointed out, which will therefore be sufficient at least for our present purposes.

It is evident, however, that any classification of this sort must be more or less arbitrary; for all mankind being only one genus,—in fact one species according to the scientific definition of that group,—and the most distinct branches being consequently capable of breeding in and in, and producing fertile offspring, it is almost impossible that any race should long retain its absolute purity. It is true, nevertheless, that the offspring of two very distinct varieties have a tendency, after a while, to return to the characteristics of one or other of their parents; but it is questionable if purity is ever actually regained, and when the families are nearly allied the mixture becomes absolute. Indeed, so

far as we can now see, the tendency of civilization and of the progress of population is, that all mankind should again become one family, and return to the primitive type from which they originally started.

Even without the admixture of blood, if there is any truth in the above theory, the distinctions between races must be after all very evanescent, and difficult to define. To express this mathematically for the sake of clearness,—if a swarm were thrown off every hundred or every thousand years from the parent family, the distinction between the one that went before and the one that followed after must necessarily be slight. If, for instance, the one that migrated earliest were placed in circumstances favourable to the retention of a certain amount of the primitive civilization, and the second were thrown where the struggle of life was of the hardest, it is probable that the distinctions between the first and second might at any given time become so evanescent that it would be impossible to seize them. It is thus only possible to reason by types, never attempting to define too accurately the boundaries of each group; but these types are so distinct, and these features so strongly marked, even in the present day, that a knowledge of them is the key to half the mysteries of History; and without clearly appreciating the distinctions of race, it is impossible to understand the history of the arts, and more especially of Architecture. Without ethnography, the history of Architecture is a mere dry, hard recapitulation of uninteresting facts and terms; but when its relation to the world's history is understood,—when we read in their buildings the feelings and aspirations of the people who erected them,—and above all, when through their arts we can trace their relationship to, and their descent from one another,—the study becomes one of the most interesting, as well as one of the most useful, which can be presented to an inquiring mind. But in order to understand this, it is necessary to try and define, as clearly as may be possible, the leading characteristics of the great typical races of mankind, at least to such an extent as may enable us to understand their works; and this is the object of the following sketch.

CHAPTER I.

TURANIAN.

THE great feature in the history of the Turanian races is that they were the first to people the whole world beyond the limits of the original cradle of mankind. Like the primitive unstratified rocks of geologists, they form the substructure of the whole world, frequently rising into the highest and most prominent peaks, sometimes overflowing whole districts, and occupying a vast portion of the world's surface;—everywhere underlying all the others, and affording their disintegrated materials to form the more recent strata that now overlie and frequently obliterate them,—in appearance at least.

In the old world the typical Turanians were the Egyptians; in the modern the Chinese and Japanese;¹—and to these we are perhaps justified in adding the Mexicans. If this last adscription stands good, we have at three nearly equidistant points (120 degrees apart) on the earth's surface, and under the tropic of Cancer, the three great culminating points of this form of civilization. The outlying strata in Asia are the Tamuls, who once occupied all India, and all the races now existing in the countries between India and China. The Turanians existed in Assyria before the Semitic or Aryan races came there. The Tunguses in the north are Turanians, and so are the Mongols, the Turks, and all those tribes generally described as Tartars.

In Europe the race crops up in the Magyars, the Finns, the Lapps, and in odd broken fragments here and there, but everywhere overpowered by the more civilized Aryans, who succeeded and have driven them into the remotest corners of the continent.

In Africa they have been almost as completely overpowered by the Semitic race, and in America are now being everywhere as entirely overwhelmed as they were in Europe by the Aryan races, and in all probability will soon disappear altogether.

¹ There is no parallel in the whole history of the world so striking as that which exists between the Egyptians and Chinese. With a slight variation in the outward aspect their civilization seems to be the same, to have reached the same relative degree of perfection, and to have retained it unchanged and unchangeable through an equally long period of time. Their arts, though differing in form, attained about the same relative position, and so did their literature, as far as we have the means of judging; while their mode of writing differed as essentially from that of the

rest of the world, and the one is as cumbrous as the other.

Their history, too, presents the same long series of dynasties and chronological lists of names without histories attached to them. The Tartars have done in China exactly what the Hyksos or Shepherd kings did in Egypt. We at Canton were placed precisely as the Greeks at Naucratis. It may not be easy to predict who may be called upon to play the part of Alexander, though it is not difficult to foresee who will perform that of the Romans.

Even if the linguist should hesitate to affirm that all their languages can be traced to a common root, or present sufficient affinities for a classification, the general features of the races enumerated above are so alike the one to the other, that, for all real ethnographic purposes, they may certainly be considered as belonging to one great group. Whether nearly obliterated, as they are in most parts of Europe, or whether they still retain their nationality, as in the eastern parts of Asia, they always appear as the earliest of races, or the first to leave the parent hive, and everywhere present peculiarities of feeling and civilization easily recognized, and which distinguish them from all the other races of mankind.

If they do not all speak cognate languages, or if we cannot now trace their linguistic affinities, we must not too readily assume that therefore they are distinct the one from the other. It must be more philosophical to believe, which probably is the case, that the one instrument of analysis we have hitherto used is not sufficient for the purpose, and consequently we ought to welcome every other process which will throw further light on the subject.

RELIGION OF THE TURANIANS.

No Turanian race ever rose to the idea of a God external to the world. All their gods were men who had lived with them on the face of the earth. In the old world they were kings,—men who had acquired fame from the extent of their power, or greatness from their wisdom. The Buddhist reform taught the Turanian races that virtue, not power, was true greatness, and that the humblest as well as the highest might attain beatitude through the practice of piety.

All the Turanians have a distinct idea of rewards and punishments after death, and generally also of a preparatory purgatory by transmigration through the bodies of animals, clean or unclean according to the actions of the defunct spirit, but always ending in another world. With some races transmigration becomes nearly all in all; in others it is nearly evanescent, and Heaven and Hell take its place; but the two are essentially doctrines of this race.

From the fact of their gods having been only ordinary mortals, and all men being able to aspire to the godhead, their form of worship was essentially anthropic and ancestral; their temples were palaces, where the gods sat on thrones and received petitions and dispensed justice as in life, and where men paid that homage to the image of the dead which they would have paid to the living king. They were in fact the idolaters, *par excellence*. Their tombs were more sacred than even their temples, and their reverence was more frequently directed to the remains of their ancestors than to the images of their gods.

Unable to rise above humanity in their conceptions of the deity, they worshipped all material things. Trees with them in all times were objects of veneration, and of especial worship in particular localities. The mysterious serpent was with them a god, and the bull in most Turanian countries an object of special veneration. The sun, the

moon, the stars, all filled niches in their Pantheon; in fact, whatever they saw they believed in, whatever they could not comprehend they revered. They cared not to inquire beyond the evidence of their senses, and were incapable of abstracting their conceptions. To the Turanians also is due that peculiar reverence for localities made celebrated by great historical events, or rendered sacred by being the scene of great religious manifestations, and hence to them must be ascribed the origin of pilgrimages with all their concomitant adjuncts and ceremonies.

It is to this race also that we owe the existence of human sacrifices. Always fatalists, always and everywhere indifferent to life, and never fearing death, these sacrifices never were to them so terrible as they appear to more highly organized races. Thus a child, a relative, or a friend, was the most precious, and consequently the most acceptable offering a man could bring to appease the wrath or propitiate the favour of a god who had been human, and all whose feelings were supposed to be retained for ever afterwards.

It is easy to trace their tree and serpent worship in every corner of the old world from Anaradhapura in Ceylon, to Upsala in Sweden. Their tombs and tumuli exist everywhere. Their ancestral worship is the foundation at the present day of half the popular creeds of the world, and the planets have hardly ceased to be worshipped at the present hour. Most of the more salient peculiarities of this faith were softened down by the great Buddhist reform in the sixth century B.C., and that refinement of their rude primitive belief has been adopted by most of the Turanian people of the modern world; but through its gloss we can still discern most of the old forms of faith, and even its most devoted votaries are yet hardly more than half converted.

GOVERNMENT.

The only form of government ever adopted by any people of Turanian race was that of absolute despotism,—with a tribe, a chief,—with a kingdom, a despot. In highly civilized communities, like those of Egypt and China, their despotism was tempered by bureaucratic forms, but the chief was always as absolute as a Timour or an Attila, though not always strong enough to use his power as terribly as they did. Their laws were real or traditional edicts of their kings, seldom written, and never administered according to any fixed form of procedure.

As a consequence or a cause of this, the Turanian race are absolutely casteless; no hereditary nobility, no caste of priests ever existed among them; between the ruler and the people there could be nothing, and every one might aspire equally to all the honours of the State, or to the highest dignity of the priesthood. "*La carrière ouverte aux talents*," is essentially the motto of these races or of those allied to them; and whether it was the slave of a Pharaoh, or the pipe-bearer of a Turkish sultan, every office except the throne is and always was open to the ambitious. No republic, no limited monarchy, ever arose among them. Despotism pure and simple is all they ever knew, or are even now capable of appreciating.

MORALS.

Woman among the Turanian races was never regarded otherwise than as the helpmate of the poor, and the plaything of the rich; born to work for the lower classes, and to administer to the gratification of the higher. No equality of rights or position was ever dreamt of, and the consequence was polyandry where people were poor and women scarce, and polygamy where wealth and luxury prevailed; and with these, it need hardly be added, a loss of half those feelings which ennoble man or make life valuable.

Neither loving nor beloved in the bosom of his own family,—too much of a fatalist to care for the future,—neither enjoying life nor fearing death,—the Turanian is generally free from those vices which contaminate more active minds; he remains sober, temperate, truthful, and kindly in all the relations of life; but if he has few vices he has fewer virtues, and both are far more passive than active in their nature,—in fact, approach more nearly to the instincts of the lower animals than to the intellectual responsibilities of the highest class of minds.

LITERATURE.

No Turanian race ever had a literature, properly so called. They all possessed annals, because they loved to record the names, the dates, and the descent of their ancestors; but these never rose to the dignity of history even in its simplest form. Prose they could hardly write, because none of the greater groups ever had an alphabet. Hieroglyphies, signs, symbols, anything sufficed for their simple intellectual wants, and they preferred trusting to memory to remember what a sign stood for, rather than exercise their intellect to compound or analyse a complex alphabetical arrangement. Their system of poetry helped them, to some extent, over the difficulty; and, with a knowledge of the metre, a few suggestive signs enabled the reader to remember at least a lyric composition. But without an alphabet it is hopeless to expect that either Epic or Dramatic Poetry could flourish, still less that a prose narrative of any extent could be remembered; and philosophy, beyond the use of proverbs, was out of the question.

In their most advanced stages they have, like the Chinese, invented syllabaria of hideous complexity, and have even borrowed alphabets from their more advanced neighbours. By some it is supposed that they have even invented them; but though they have thus got over the mechanical difficulties of the case, their intellectual condition remains the same, and they have never advanced beyond the merest rudiments of a literature, and have never mastered even the elements of any scientific philosophy.

ARTS.

If so singularly deficient in the phonetic modes of literary expression, the Turanian races made up for it to a great extent in the excellence they attained in most of the branches of æsthetic art. As

architects they were unsurpassed, and in Egypt alone have left monuments which are still the world's wonder. In Southern India, in Burmah, in China, and in Mexico, wherever these races are found, they have raised monuments of dimensions unsurpassed; and, considering the low state of civilization in which they often existed, displaying a degree of taste and skill as remarkable as it is unexpected.

In consequence of the circumstance above mentioned of their gods having been kings, and after death still only considered as watching over and influencing the destiny of mankind, their temples were only exaggerated palaces, containing halls, and chambers, and thrones, and all the appurtenances required by the living, but on a scale befitting the celestial character now acquired. So much is this the case in Egypt that we hardly know by which name to designate them, and the same remark applies to all.

Even more sacred, however, than their temples were their tombs. Wherever a Turanian race exists or existed, there their tombs remain; and from the Pyramids of Egypt to the mausoleum of Hyder Ali, the last Tartar king in India, they form the most remarkable series of monuments the world possesses, and all were built by people of Turanian race. No Semite and no Aryan ever built a tomb that could last a century or was worthy to remain so long.

The Buddhist reform altered the funereal tumulus into a relic shrine, modifying this, as it did most of the Turanian forms of utterance, from a literal to a somewhat more spiritual form of expression, but leaving the meaning the same,—the type being still essentially a tomb.

Combined with that wonderful appreciation of form which characterizes all the architectural works of the Turanians, they possessed an extraordinary passion for coloured decoration and an instinctive feeling for the harmony of colours. They used throughout the primitive colours in all their elemental crudeness; and though always brilliant, are never vulgar, and never made a mistake in harmony. From the first dawn of painting in Egypt to the last signboard in Constantinople or Canton, it is always the same—the same brilliancy and harmony produced by the simplest means.

In sculpture they were not so fortunate. Having no explanatory literature to which to refer, it was necessary that their statues should tell their whole tale themselves; and sculpture does not lend itself to this so readily as painting. It is not sufficient that a god should be colossal, he must be symbolical; he must have more arms and legs or more heads than common men; he must have wings and attributes of power. He must, in short, tell the whole story himself; and where this is attempted the result can only be pleasing to the narrow faith of the unreflecting devotee. So far from being able to express more than humanity, sculpture must attempt even less if it would be successful; but this of course rendered it useless for the purposes to which the Turanians wished to apply it.

The same remarks apply to painting, properly so called. This

never can attain its highest development except when it is the exponent of phonetic utterances. In Greece the painter strove only to give form and substance to the purely intellectual creation of the poet, and could consequently dispense with all but the highest elements of his art. In Egypt the picture was all in all; it had no text to refer to, and must tell the whole tale, with all its adjuncts, in simple narrative prose, or be unintelligible; and the consequence is that the story is told with a clearness that charms us even now. It is, however, only a story; and, like everything else Turanian, however great or wonderful, its greatness and its wonder are of a lower class and less intellectual than the utterances of the other great divisions of the human family.

We have scarcely the means of knowing whether any Turanian race ever successfully cultivated music to any extent. It is more than probable that all their families can and always could appreciate the harmony of musical intervals, and might be charmed with simple cadences; but it is nearly certain that a people who did not possess phonetic poetry could never rise to that higher class of music which is now carried to such a pitch of perfection that harmonic intervals almost supply the place of phonetic expression, and influence the feelings and passions to almost the same extent.

There is also this further peculiarity about their arts, that they seem always more instinctive than intellectual, and consequently are incapable of that progress which distinguishes most of the works of man. At the first dawn of art in Egypt, in the age of the Pyramid-builders, all the arts were as perfect and as complete as they were when the country fell under the domination of the Romans. The earliest works in China are as perfect—in some respects more so—as those of to-day; and in Mexico, so soon as a race of red savages peopled a country so densely as to require art and to appreciate magnificence, the arts sprung up among them with as much perfection as we may fairly assume they would have attained had they been practised for thousands of years under the same circumstances and uninfluenced by foreigners.

SCIENCES.

There is no reason to suppose that any people occupying so low a position in the intellectual scale could ever cultivate anything approaching to abstract science, and there is no proof of it existing. Living, however, as they did, on the verge of the tropics, in the most beautiful climates of the world, and where the sky is generally serene and unclouded, it was impossible but that they should become to some extent astronomers.

It is not known that any of them ever formed a theory to account for the phenomena they observed, but they seem to have watched the paths of the planets, to have recorded eclipses, and generally to have noted times and events with such correctness as enabled them to predict their return with very considerable pre-

cision; but here their science stopped, and it is not known that they ever attempted any other of the multifarious branches of modern knowledge.

We have only very imperfect means of knowing what their agriculture was; but it seems always to have been careful when once they passed from the shepherd state, though whether scientific or not it is not easy to say. On the point of artificial irrigation the Turanians have always been singularly expert. Wherever you follow their traces, the existence of a tunnel is almost as certain an indication of their pre-existence as that of a tomb. It is amusing, as it is instructive, to see at this hour an Arab Pacha breaking down in his attempts to restore the irrigation works of the old Pharaohs, or an English Engineer officer blundering in his endeavours to copy the works instinctively performed by a Mogul, or a Spaniard trying to drain the lakes in Mexico. Building and irrigation were the special instincts of this old people, and the practical intellect of the higher races seems hardly yet to have come up to the point where these arts were left by the early Turanians, while the perfection they attained in them is the more singular from the contrast it affords to what they did, or, rather, did not do, in other branches of art or science.

A man must have very little philosophy in his composition who would conclude from these differences that the Turanians are either better or worse than the races that have superseded them. If their virtues are more negative than positive, their vices are more passive than active. Their arts may be more sensual than spiritual, and their sciences more instinctive than intellectual. It must, consequently, perhaps be admitted that they do stand on a lower pedestal than the others, and their pendulum vibrates through a smaller arc. But they have sterling qualities which command the respect and esteem of all, and they fill or have occupied as important a space in the great scheme of humanity as any of the other races of mankind.

CHAPTER II.

SEMITIC.

It is by no means clear where the original seat of the Semitic races may have been, but we first find them according to tradition somewhere about the sources of the Tigris and Euphrates. Thence they migrated along the course of those two rivers, and at the dawn of history we find them settled in the plains of Shinar, in a country previously occupied by tribes of Turanian origin. From this point they peopled Arabia, a country that hardly seems to have been occupied before, and where consequently their blood is comparatively pure and unmixed to this day; and thence to have passed the Straits of Bab-el-Mandeb into Africa. A more important colony proceeded by the valley of the Euphrates into Syria, in which country the Phœnicians, an earlier but less completely-formed race of Semites, had preceded them.

From the extraordinary influence the Semitic races have had in the religious development of mankind, we are apt to consider them as politically more important than they really ever were. At no period of their history have they numbered more than twenty or thirty millions of souls. The principal locality in which they developed themselves was the small tract of country between the Tigris, the Mediterranean, and the Red Sea; but they also existed as a separate race in Abyssinia, and extended their colonies along the northern coast of Africa. Their intellectual development has been in all ages so superior to that of the Turanian races, that they have subdued them mentally wherever they came in contact with them; and notwithstanding their limited geographical extension, they have influenced the intellect of the Aryan tribes to a greater extent than almost any of their own congeners.

If anything were required to justify the ethnographer in treating the various families of mankind as distinct and separate varieties, it would be the study of the history of the Semitic race. What they were in the time of Abraham, that they are at the present day. A large section of them sojourned in Egypt, among people of Turanian descent, and they came out as unmixed as oil would do that is floated on water. For the last two thousand years they have dwelt dispersed among the Gentiles, without a nationality, almost without a common language; yet they remain the same in feature, the same in intellectual development and feeling, they exhibit the same undying repugnance to all except those of their own blood, which characterised the Arab and the Jew when we first recognise their names in history. So unchangeable are they in this respect, that it seems in vain to try to calculate how long this people must have lived by themselves, separated from other

racess, that they should have thus acquired that distinctive fixity of character nothing can alter or obliterate, and which is perhaps even more wonderful intellectually than are the woolly hair and physical characteristics of the negro, though not so obvious to the superficial observer.

RELIGION.

From the circumstance of our possessing a complete series of the religious literature of the Semitic race, extending over the two thousand years which elapsed between Moses and Mahomet, we are enabled to speak on this point with more precision than we can regarding the doctrines of almost any other people.

Their great and distinguishing tenet is and always was the unity of God, and his not being born of man. Unlike the gods of the Turanians, their Deity never was man, never reigned or lived on earth, but was the Creator and Preserver of the universe, living before all time, and extending beyond all space; though it must be confessed they have not always expressed this idea with the purity and distinctness which might be desired.

It is uncertain how far they adhered to this purity of belief in Assyria, where they were more mixed up with other races than they have ever been before or since. In Syria, where they were superimposed on people of Turanian origin, they occasionally worshipped stones and groves, serpents, and even bulls; but they inevitably oscillated back to the true faith and retained it to the last. In Arabia, after they became dominant, they cast off their Turanian idolatries, and rallied as one man to the watchword of their race, "There is no God but God," expressed with a clearness that nothing can obscure, and clung to it with a tenacity that nothing can shake or change. Since then they have never represented God as man, and hardly ever looked upon Him as actuated by the feelings of humanity.

The channel of communication between God and man has always been, with all the Semitic races, by means of prophecy. Prophets are sent or are inspired by God, to communicate his will to man, to propound his laws, and sometimes to foretell events; but in all instances without losing their character as men, or becoming more than messengers for the special service for which they are sent.

With the Jews, but with them only, does there seem to have been a priest caste set aside for the special service of God; not selected from all the people, as would have been the case with the casteless Turanians, but deriving their sanctity from descent, as would have been the case with the Aryans; still they differed from the Aryan institution inasmuch as the Levites always retained the characteristics of a tribe, and never approached the form of an aristocracy. They may therefore be considered ethnographically as an intermediate institution, partaking of the characteristics of the other two races.

The one point in which the Semitic form of religion seems to come in contact with the Turanian, is that of sacrifice; not human, it is true, except perhaps in the case of Abraham, but of oxen and sheep

and goats in hecatombs; and this met among the Arabs, but only with the Jews and the less pure Phœnicians.

From their having no human gods they avoided all the palatial temples or ceremonial forms of idolatrous worship. Strictly speaking, they have no temples. There was one holy place in the old world, the Hill of Zion at Jerusalem, and one in the new dispensation, the Kaaba at Mecca. Solomon, it is true, adorned the first to an extent but little consonant with the true feeling of his race, but the Kaaba remains in its primitive insignificance; and neither of these temples, either then or now, derives its sanctity from the buildings. They are the spots where God's prophets stood and communicated his will to man. It is true that in after ages a Roman Tetrarch and a Turkish Sultan surrounded these two Semitic cells with courts and cloisters, which made them wonders of magnificence in the cities where they existed; but this does not affect the conclusion that no Semitic race ever erected a durable building, or even thought of possessing more than one temple at a time, or cared to emulate the splendour of the temple-palaces of the Turanians.

GOVERNMENT.

Although no Semitic race was ever quite republican, which is a purely Aryan characteristic, they never sank under such an unmitigated despotism as is generally found among the Turanians. When in small nuclei, their form of government is what is generally called patriarchal, the chief being neither necessarily hereditary nor necessarily elective, but attaining his headship by the influence due partly to age and wisdom or to virtue, partly to the merits of his connections, and sometimes of his ancestors; but never wholly to the latter without some reference at least to the former.

In larger aggregations the difficulty of selection made the chiefship more generally hereditary; but even then the power of the king was always controlled by the authority of the written law, and never sank into the pure despotism of the Turanians. With the Jews, too, the sacred caste of the Levites always had considerable influence in checking any excesses of kingly power; but more was due in this respect to their peculiar institution of prophets, who, protected by the sacredness of their office, at all times dared to act the part of tribunes of the people, and to rebuke with authority any attempt on the part of the king to step beyond the limits of the constitution.

MORALS.

One of the most striking characteristics in the morals of the Semitic races is the improvement in the position of woman, and the attempt to elevate her in the scale of existence. If not absolutely monogamic, there was among the Jews, and among the Arabic races where they are pure, a strong tendency in this direction; and but for the example of those nations among whom they were placed, they might have gone

further in this direction, and the dignity of mankind have been proportionately improved.

Their worst faults arose from their segregation from the rest of mankind. With them war against all but those of their own race is an obligation and a pleasure, and it is carried on with a relentless cruelty which knows no pity. To smite root and branch, to murder men, women, and children, is a duty which admits of no hesitation, and has stained the character of the Semites in all ages. Against this must be placed the fact that they are patriotic beyond all other races, and steadfast in their faith as no other people have ever been; and among themselves they have been tempered to kindness and charity, by the sufferings they have had to bear because of their uncompromising hatred and repugnance to all their fellow-men.

This isolation has had the further effect of making them singularly apathetic to all that most interests the other nations of the earth. What their God has revealed to them through his prophets suffices for them. "God is great," is a sufficient explanation with them for all the wonders of science. "God wills it," solves all the complex problems of the moral government of the world. If not such absolute fatalists as the Turanians, they equally shrink from the responsibility of thinking for themselves, or of applying their independent reason to the great problems of human knowledge. They may escape by this from many aberrations that trouble more active minds, but their virtues at best can be but negative, and their vices unredeemed by the higher aspirations that sometimes half ennoble even crime.

LITERATURE.

In this again we have an immense advance above all the Turanian races. No Semitic people ever used a hieroglyph or mere symbol, or was content to trust to memory only. Everywhere and at all times—so far as we know—they used an alphabet of more or less complicated form. Whether they invented this mode of notation or not is still unknown, but its use by them is certain; and the consequence is that they possess, if not the oldest, at least one of the very oldest literatures of the world. History with them is no longer a mere record of names and titles, but a chronicle of events, and with the moral generally elicited. The story and the rhapsody take their places side by side, the preaching and the parable are used to convey their lesson to the world. If they had not the Epos and the Drama, they had lyric poetry of a beauty and a pathos which has hardly ever been surpassed.

It was this possession of an alphabet, conjoined with the sublimity of their monotheistic creed, that gave these races the only superiority to which they attained, has enabled them to keep themselves pure and undefiled in all the catastrophes to which they have been exposed, and that has enabled their literature and their creed to exert an influence over almost all the nations of the earth, even in times when the people themselves have been held in most supreme contempt.

ARTS.

It may have been partly in consequence of their love of phonetic literature, and partly in order to keep themselves distinct from those great builders the Turanians, that the Semitic races never erected a building worthy of the name; neither at Jerusalem, nor at Tyre or Sidon, nor at Carthage, is there any vestige of Semitic Architectural Art. Not that these have perished, but because they never existed. When Solomon proposed to build a temple at Jerusalem, though plain externally, and hardly so large as an ordinary parish church, he was forced to have recourse to some Turanian people to do it for him, and by a display of gold and silver and brass ornaments to make up for the architectural forms he knew not how to apply.

In Assyria we have palaces of dynasties more or less purely Semitic, splendid enough, but of wood and sunburnt bricks, and only preserved to our knowledge from the accident of their having been so clumsily built as to bury themselves and their wainscot slabs in their own ruins. Though half the people were probably of Turanian origin, their temples seem to have been external and unimportant till Sennacherib and others learnt the art from the Egyptians, as the Syrians did afterwards from the Romans. During the domination of the last-named people, we have the temples of Palmyra and Baalbec, of Jerusalem and Petra: everywhere an art of the utmost splendour, but without one trace of Semitic feeling or Semitic taste in any part or in any detail.

The Jewish worship being neither ancestral, nor the bodies of their dead being held in special reverence, they had no tombs worthy of the name. They buried the bodies of their patriarchs and kings with care, and knew where they were laid; but not until after the return from the Babylonish captivity did they either worship there, or mark the spot with any architectural forms, though after that epoch we find abundant traces of a tendency towards that especial form of Turanian idolatry. But even then the adornment of their tombs with architectural magnificence cannot be traced back to an earlier period than the time of the Romans; and all that we find marked with splendour of this class was the work of that people, and stamped with their peculiar forms of Art.

Painting and sculpture were absolutely forbidden to the Jews because they were Turanian arts, and because their practice might lead the people to idolatry, so that these nowhere existed: though we cannot understand a people with any mixture of Turanian blood who had not an eye for colour, and a feeling for beauty of form, in detail at least.¹ Music alone was therefore the one æsthetic art of the Semitic

¹ All round the shores of the Mediterranean are found the traces of an art which has hitherto been a stumbling-block to antiquarians. Egyptian cartouches and ornaments in Assyria, which are not Egyptian; sarcophagi at Tyre, of Egyptian form, but with Phœnician inscriptions, and made for Tyrian kings; Greek ornaments in Syria, which are not Greek; Roman frescoes or ornaments, and architectural details at Carthage, and all

over Northern Africa, which however are not Roman. In short, a copying art something like our own, imitating everything, understanding nothing.

I am indebted to my friend Mr. Franks for the suggestion that all this Art may be Phœnician, in other words Semitic. I believe he is right; and hope he will work out the subject in detail, which no one is more competent to do than himself.

racés, and, wedded to the lyric verse, seems to have influenced their feelings and excited their passions to an extent unknown to other nations; but to posterity it cannot supply the place of the more permanent arts, whose absence is so much felt in attempting to realize the feelings or aspirations of a people like this.

As regards the useful arts, the Semites were always more pastoral than agricultural, and have not left in the countries they inhabited the traces of such hydraulic works as the earlier races executed; but in commerce they excelled all nations. The Jews—from their inland situation, cut off from all access to the sea—could not do much in foreign trade; but they always kept up their intercourse with Assyria. The Phœnicians traded backwards and forwards with every part of the Mediterranean, and first opened out a knowledge of the Atlantic; and the Arabs first commenced, and for long afterwards they alone carried on, the trade with India. From the earliest dawn of history to the present hour, commerce has been the art which the Semitic nations have cultivated with the greatest assiduity, and in which they consequently have attained the greatest and an unsurpassed success.

In Asia and in Africa at the present day, all the native trade is carried on by Arabs; and it need hardly be remarked that the monetary transactions of the rest of the world are practically managed by the descendants of those who, one thousand years before Christ, traded from Eziongeber to Ophir.

SCIENCES.

Although, as before mentioned, Astronomy was cultivated with considerable success both in Egypt and Chaldæa among the more contemplative Turanians, nothing can be more unsatisfactory than the references to celestial events, either in the Bible or the Koran, both betraying an entire ignorance of even the elements of astronomical science: and we have no proof that the Phœnicians were at all wiser than their neighbours in this respect.

The Semitic races seem always to have been of too poetical a temperament to excel in mathematics or the mechanical sciences. If there is one branch of scientific knowledge which they may be suspected of having cultivated with success, it is the group of natural sciences. A love of nature seems always to have prevailed with them, and they may have known "the trees, from the cedar which is in Lebanon to the hyssop that springeth out of the wall, and the names of all the beasts, and the fowls, and the creeping things, and the fishes;" but beyond this we know of nothing that can be dignified by the name of science among the Semitic races. They more than made up however for their deficient knowledge of the exact sciences by the depth of their insight into the springs of human action, and the sagacity of their proverbial philosophy; and, more than even this, by that wonderful system of Theology before which all the Aryan races of the world and many of the Turanian bow at the present hour, and acknowledge it as the basis of their faith, and the source of all their religious aspirations.

CHAPTER III.

CELTIC.

It is extremely difficult to write anything very precise or very satisfactory regarding the Celtic races, for the simple reason that, within the limits of our historic knowledge, they never lived sufficiently long apart from other races to develop a distinct form of nationality, or to create either a literature or a polity by which they could be certainly recognised. In this respect they form the most marked contrast with the Semitic races. Instead of wrapping themselves up within the bounds of the most narrow exclusiveness, the Celt everywhere mixed freely with the people among whom he settled, and adopted their manners and customs with a carelessness that is startling; while, at the same time, he retained the principal characteristics of his race through every change of circumstance and clime.

Almost the only thing that can be predicated of them with certainty is, that they were either the last wave of the Turanians, or, if another nomenclature is preferred, the first wave of the Aryans, who, migrating westward from the parent seat, displaced the original and more purely Turanian tribes who occupied Europe before the dawn of history. But, in doing this, they seem to have mixed themselves so completely with the races they were supplanting, that it is extremely difficult to say now where one begins or where the other ends.

Reasoning on the basis of the hypothesis adopted above, we may assume that the Celtic swarm was thrown off from the parent horde about the same time as the Semitic. An Ethnographer would say earlier—a Philologist, that it must have been later; but this is unimportant to our present purpose. We next find them in Asia Minor, whence Ethnologists fancy that they can trace a southern migration along the northern coast of Africa, across the Straits of Gibraltar, into Spain, and thence to Ireland; but all this is, to say the least of it, based on very imperfect data.

A more certain and more important migration crossed the Bosphorus, and, following the valley of the Danube, threw one branch into Italy, where they penetrated as far south as Rome; while the main body settled in and occupied Gaul and Belgium, whence they peopled Britain, and may have met the southern colonists in the Celtic Island of the west. From this they are now migrating, still following the course of the sun, to carry to the New World the same brilliant thoughtlessness which has so thoroughly leavened all parts of the Old in which they have settled, and which so sorely puzzles the more matter-of-fact Aryan tribes with which they have come in contact.

RELIGION.

It may appear like a hard saying, but it seems nevertheless to be true, to assert that no purely Celtic race ever rose to a perfect conception of the unity of the Godhead. It may be that they only borrowed this from the Turanians who preceded them; but whether imitative or innate, their Theology admits of Kings and Queens of Heaven, who were mortals on earth. They possess hosts of saints and angels, and a whole hierarchy of heavenly powers of various degrees, to whom the Celt turns with as confiding hope and as earnest prayer as ever Turanian did to the gods of his Pantheon. If he does not reverence the bodies of the departed as the Egyptian or Chinese, he, at least, adopts the Buddhist veneration for relics, and attaches far more importance to funeral rites than was ever done by any tribe of Aryans.

The Celt is as completely the slave of a casteless priesthood as ever Turanian Buddhist was, and loves to separate it from the rest of mankind, as representing on earth the hierarchy in heaven, to which, according to the Celtic creed, all may hope to succeed by practice of their peculiar virtues.

To this may be added, that his temples are as splendid, his ceremonies as gorgeous, and the formula as unmeaning, as any that ever graced the banks of the Nile, or astonished the wanderer in the valleys of Thibet, or on the shores of the Eastern Ocean.

GOVERNMENT.

It is still more difficult to speak of the Celtic form of government, as no kingdom of this people ever existed by itself for any length of time; and none, indeed, it may be suspected, could long hold together. It may, however, be safely asserted, that no republican forms are possible with a Celtic people, and no municipal institutions ever flourished among them. The only form, therefore, we know of as peculiarly theirs, is despotism; not necessarily personal, but rendered systematic by centralized bureaucratic organizations, and tempered by laws in those states which have reached any degree of stability or civilization.

Nothing but a strong centralized despotism can long co exist with a people too impatient to submit to the sacrifices and self-denial inherent in all attempts at self-government, and too excitable to be controlled, except by the will of the strongest, though it may also be the least scrupulous among them.

When in small bodies, they are always governed by a chief, generally hereditary, but always absolute, who is looked up to with awe, and obeyed with a reverence that is unintelligible to the more independent races of mankind.

With such institutions, of course a real aristocracy is impossible; and the restraints of caste must always have been felt to be intolerable. "*La carrière ouverte aux talents*" is their boast, though not to the same extent as with the Turanians; and the selfish gratification of

individual ambition is consequently always preferred with them to the more sober benefit of the general advancement of the community.

MORALS.

If the Celts never were either polygamic or polyandric, they certainly always retained very lax ideas with regard to the marriage-vow, and never looked on woman's mission as anything higher than to minister to their sensual gratification. With them the woman that fulfils this quality best always commands their admiration most. Beauty can do no wrong—but without beauty woman can hardly rise above the level of the common herd.

The ruling passion in the mind of the Celt is war. Not like the exclusive, intolerant Semite, a war of extermination or of proselytism, but war from pure "*gaieté de cœur*" and love of glory. No Celt fears to die, if his death can gain fame, or add to the stock of his country's glory; nor in a private fight does he fear death or care for pain, if he has had a chance of shooting through the heart, or at least wounding, his best friend at the same time. The Celt's love of excitement leads him frequently into excesses, and to a disregard of truth and the virtues belonging to daily life, which are what really dignify mankind; but his love of glory and of his country often goes far to redeem these deficiencies, and spreads a halo over even his worst faults, which renders it frequently difficult to blame what we feel in soberness we ought to condemn.

LITERATURE.

If love and war are the parents of song, the bard and the troubadour ought to have left us a legacy of verse that would have filled the libraries of Europe; and so they probably would, had not the original Celt been too illiterate to care to record the expressions of his feelings. As it is, nine-tenths of the lyric literature of Europe is of Celtic origin. The Epos and the Drama may belong to the Aryan; but in the art of wedding music to immortal verse, and pouring forth a passionate utterance in few but beautiful words, the Celtic is only equalled by the Semitic race.

Their remaining literature is of such modern growth, and was so specially copied from what had preceded it, or so influenced by the contemporary effusions of other people, that it is impossible accurately to discriminate what is due to race and what to circumstances. All that can safely be said is, that Celtic literature is always more epigrammatic, more brilliant, and more daring than that of the sober Aryan; but its coruscations neither light to so great a depth, nor last so long, as less dazzling productions might do. They may be the most brilliant, but they certainly do not belong to the highest class of literary effort; nor is their effect on the destiny of man likely to be so permanent.

ARTS.

The true glory of the Celt in Europe is his artistic eminence. It is perhaps not too much to assert that without his intervention we should not have possessed in modern times a church worthy of admiration, or a picture or a statue we could look at without shame.

In their arts, too,—either from their higher status, or from their admixture with Aryans,—we escape the instinctive fixity which makes the arts of the pure Turanian as unprogressive as the works of birds or of beavers. Restless intellectual progress characterizes everything they perform; and had their arts not been nipped in the bud by circumstances over which they had no control, we might have seen something that would have shamed even Greece, and wholly eclipsed the arts of Rome.

They have not, it is true, that instinctive knowledge of colour which distinguishes the Turanian, nor have they been able to give to music that intellectual culture which has been elaborated by the Aryans; but in the middle path between the two they excel both. They are far better musicians than the former, and far better colourists than the last-named races; but in modern Europe Architecture is practically their own. Where their influence was strongest, there Architecture was most perfect; as they died out, or as the Aryan influence prevailed, the art first languished, and then died.

Their quasi-Turanian theology required Temples almost as grand as those of the Copts or Tamuls; and, like them, they sought to honour those who had been mortals by splendour which mortals are assumed to be pleased with; and the pomp of their worship always surpassed that with which they honoured their kings. Even more remarkable than this is the fact that they could and did build Tombs such as a Turanian might have envied, not for their size, but for their art, and even now can adorn their cemeteries with monuments which are not ridiculous.

When a people are so mixed up with other races as the Celts are in Europe,—frequently so fused as to be undistinguishable,—it is almost impossible to speak with precision with regard either to their arts or influence. It must in consequence be safer to assert that where no Celtic blood existed there no real Art is found; though it is perhaps equally true to assert that not only Architecture, but Painting and Sculpture, have been patronized and have flourished in the exact ratio in which Celtic blood is found prevailing in any people in Europe; and have died out as Aryan influence prevails, in spite of their methodical efforts to indoctrinate themselves with what must be the spontaneous impulse of genius, if it is to be of any value.

SCIENCES.

Of their sciences we know nothing, till they were so steeped in the civilization of elder worlds that originality was hopeless. Still, in the stages through which the intellect of Europe has yet passed,

they have played their part with brilliancy. But now that knowledge is assuming a higher and more prosaic phase, it is doubtful whether the deductive brilliancy of the Celtic mind can avail anything against the inductive sobriety of the Aryan. So long as metaphysics were science, and science was theory, the peculiar form of the Celtic mind was singularly well adapted to see through sophistry, and to guess the direction in which truth might lie. But now that we have only to question nature, to classify her answers, and patiently to record results, its mission seems to have passed away. Truth in all its majesty, and Nature in all her greatness, must now take the place of speculation, with its cleverness, and of man's ideas of what might or should be, as compared with the knowledge of God's works as they exist, and the contemplation of the eternal grandeur of the universe which we see around us.

Though these are the highest, they are at the same time the most sober functions of the human mind; and while conferring the greatest and most lasting benefit, not only on the individual who practises them, but also on the human race, they are neither calculated to gratify personal vanity, nor to reward individual ambition.

Such pursuits are not, therefore, of a nature to attract or interest the Celtic races, but must be left to those who are content to sink their personality in seeking the advantage of the common weal.

CHAPTER IV.

ARYAN.

ASSUMING the theory enunciated in page 497 to represent the facts of the case with sufficient correctness, it must follow that the Sanscrit-speaking races of India were the last to leave their fatherland; and, as hinted above, probably in consequence of some reflex wave of Turanian or semi-Turanian blood, which had acquired sufficient consistency to desire, and sufficient strength to attempt to regain, the heritage of their forefathers.

According to their own chronology, it seems to have been about the year 3101 B.C. that the Aryans crossed the Indus and settled in the country between that river and the Jumna, since known among themselves as Arya Vartta, or the Country of the Just, for all succeeding ages.

More than a thousand years afterwards we find them, in the age of the Ramayana, occupying all the country north of the Vindya range, and attempting the conquest of the southern country,—then, as now, occupied by Turanians,—and penetrating as far as Ceylon.

Eight hundred years later we see them in the Mahabharat, having lost much of their purity of blood, and adopting many of the customs and much of the faith of the people they were settled amongst; and three centuries before Christ we find they had so far degenerated as to accept, almost without a struggle, the religion of Buddha; which, though no doubt a reform, and an important one, on the Anthropic doctrines of the pure Turanians, was still essentially a faith of a Turanian people; congenial to them, and to them only.

Ten centuries after Christ, when the Moslems came in contact with India, the Aryan was a myth. The religion of the earlier people was everywhere supreme, and with only a nominal thread of Aryanism running through the whole, just sufficient to bear testimony to the prior existence of a purer faith, but not sufficient to leaven the mass to any appreciable extent.

The fate of the western emigrants differed essentially from that of those who wandered eastward. Theoretically we ought to assume, from their less complex language and less pure faith, that they were an earlier offshoot; but it may be that in the forests of Europe they lost for awhile the civilized forms which the happier climate of Arya Vartta enabled the others to retain; or it may be that the contact with the more nearly equal Celtic races mixed the language and the faith of the western races, before they had the opportunity or the leisure to record the knowledge they brought with them.

Be this as it may, they first appear prominently in the western

world in Greece, where, by a fortunate union with the Pelasgi, a people apparently of Turanian race, they produced a civilization not purely Aryan, and somewhat evanescent in its character, but more brilliant, while it lasted, than anything the world had seen before, and, in certain respects, more beautiful than anything that has illumined it since their time.

They next sprang forth in Rome, mixed with the Turanian Etruscans and the powerful Celtic tribes of Italy; and lastly in Northern Europe are now working out their destiny, but to what issue the future only can declare.

The essential difference between the eastern and western migration is this—that in India the Aryans have sunk gradually into the arms of a Turanian people till they have lost their identity, and with it all that ennobled them when they went there, or could enable them now to influence the world again.

In Europe they found the country cleared of Turanians by the earlier Celts; and, mingling their blood with these more nearly allied races, they have raised them to a position half way between the two; and where they found the country unoccupied they have remained so pure that, as their number multiplies, they may perhaps regain something of the position they had temporarily abandoned, and something of that science which mankind only knew in their primeval seats.

RELIGION.

What then was the creed of the primitive Aryans? So far as we can now see, it was the belief in one great ineffable God,—so great that no human intellect could measure his greatness,—so wonderful that no human language could express his qualities,—pervading everything that was made,—ruling all created things,—a spirit, around, beyond the universe, and within every individual particle of it. A creed so ethereal could not long remain the faith of the multitude, and we early find fire,—the most ethereal of the elements,—looked to as an emblem of the Deity. The heavens too received a name, and became an entity;—so did our mother earth. To these succeeded the sun, the stars, the elements,—but never among the pure Aryans as gods, or as influencing the destiny of man, but as revelations of his power, and revered because they were visible manifestations of a Being too abstract for an ordinary mind to grasp. Below this the Aryans never seem to have sunk.

With a faith so elevated of course no temple could be wanted; no human ceremonial could be supposed to do honour to a deity so conceived; no sacrifice acceptable to him to whom all things belouged. With the Aryans worship was a purely domestic institution; prayer the solitary act of each individual man, standing alone in the presence of an omniscient Deity. All that was required was that man should acknowledge the greatness of God, and his own comparative insignificance; should express his absolute trust and faith in the beneficence and justice of his God, and his hope that he might be enabled

to live so pure, and so free from sin, as to deserve such happiness as this world can afford, and to do as much good to others as it is vouchsafed to man to perform.

A few insignificant formulæ served to mark the modes in which these subjects should recur. The recitation of a time-honoured hymn refreshed the attention of the worshipper, and the reading of a few sacred texts recalled the duties it was expected he should perform. With these simple ceremonies the worship of the Aryans seems to have begun and ended.

Even in later times, when their blood had become less pure, and their feelings were influenced by association with those among whom they resided, the religion of the Aryans always retained its intellectual character. No dogma was ever admitted that would not bear the test of reason, and no article of faith was ever assented to which seemed to militate against the supremacy of intellect over all feelings and passions. In all their wanderings they were always prepared to admit the immeasurable greatness of the one incorporeal deity, and the impossibility of the human intellect to approach or form any adequate conception of its majesty.

When they abandoned the domestic form of worship, they adopted the congregational, and then not so much with the idea that it was pleasing to God, as in order to remind each other of their duties, and to regulate and govern the spiritual wants of the community, to inculcate piety towards God, and charity towards each other.

It need hardly be added that superstition is impossible with minds so constituted, and that science must always be the surest and the best ally of a religion so pure and exalted, which is based on a knowledge of God's works, a consequent appreciation of their greatness, and an ardent aspiration towards that power and goodness which the finite intellect of man can never hope to reach.

GOVERNMENT.

The most marked characteristics of the Aryans is their innate passion for self-government. If not absolutely republican, the tendency of all their institutions, at all times, has been towards that form, and in almost the exact ratio to the purity of the blood do they adopt this form of autoeracy. If kingly power was ever introduced among them, it was always in the form of a limited monarchy; never the uncontrolled despotism of the other races; and every conceivable check was devised to prevent encroachments of the crown, even if such were possible among a people so organized as the Aryans always were.

With them every town was a municipality, every village a little republic, and every trade a separate self-governing guild. Many of these institutions have died out, or else fallen into neglect, in those communities where equal rights and absolute laws have rendered each individual a king in his own person, and every family a republic in itself.

The village system which the Aryans introduced into India is still

the most remarkable of its institutions. These little republican organisms have survived the revolutions of fifty centuries. Neither the devastations of war nor the indolence of peace seem to have affected them. Under Brahmin, Buddhist, or Moslem, they remain the same unchanged and unchangeable institutions, and neither despotism nor anarchy has been able to alter them. They alone have saved India from sinking into a state of savage imbecility, under the various hordes of conquerors who have at times overrun her; and they, with the Vedas and the laws afterwards embodied by Menu, alone remain as records of the old Aryan possessors of the Indian peninsula.

Municipalities, which are merely an enlargement of the Indian village-system, exist wherever the Romans were settled, or where the Aryan races exist in Europe; and though guilds are fast losing their significance, it was the Tentonic guilds that alone checked and ultimately supplanted the feudal despotisms of the Celts.

Caste is another institution of these races, which has always more or less influenced all their actions. Where their blood is so impure as it has become in India, caste has degenerated into an abuse; but where it is a living institution, it is perhaps more conducive to the proper regulation of society than any with which we are acquainted. The one thing over which no man can have any control is the accident of his birth; but it is an immense gain to him that he should be satisfied with the station in which he finds himself, and content to do his duty in the sphere in which he was born. Caste, properly understood, never interferes with the accumulation of wealth or power within the limits of the class, and only recognises the inevitable accident of birth. It is an enormous gain to society that each man should know his station, and be prepared to perform the duties belonging to it, without the restless craving of a selfish ambition that would sacrifice everything for the sake of the personal aggrandisement of the individual. It is far better to acknowledge that there is no sphere in life in which man may not become as like unto the gods as in any other sphere; and it is everywhere better to respect the public good rather than to seek to gratify personal ambition.

The populations of modern Europe have become so mixed that neither caste nor any other Aryan institution now exists in its pristine purity; but in the ratio in which a people is Aryan do they possess an aristocracy and municipal institutions; and, what is almost of more importance, in that ratio are the people prepared to respect the gradations of caste in society, and to sacrifice their individual ambition to the less brilliant task of doing all the good that is possible in the spheres in which they have been placed.

It is true, and it has been found, that an uncontrolled despotism is a sharper, a quicker, and a better tool for warlike purposes, or where national vanity is to be gratified by conquest or the display of power; but the complicated and it may be clumsy institutions of the Aryan are far more lasting and more conducive to individual self-respect, and far more likely to add to the sum of human happiness, and tend more

clearly to the real greatness and moral elevation of mankind, than any human institution we are yet acquainted with.

So far as our experience now goes, the division of human society into classes or castes is not only the most natural concomitant of the division of labour, but is also the most beneficent of the institutions of man; while the organization of a nation into self-governing municipalities is not only singularly conducive to individual well-being, but renders it practically indestructible by conquest, and even imperishable through lapse of time. These two are the most essentially characteristic institutions of the Aryans.

MORALS.

In morals the Aryans were always monogamic, and with them alone does woman always assume a perfect equality of position; mistress of her own actions till marriage; when married, in theory at least, the equal sharer in the property and in the duties of the household. Were it possible to carry out these doctrines absolutely in practice, they would probably be more conducive to human happiness than any of those enumerated above; but even a tendency towards them is an enormous gain.

Their institutions for self-government, enumerated above, have probably done more to elevate the Aryan race than can well be appreciated. When every man takes, or may take, his share in governing the commonwealth—when every man must govern himself, and respect the independence of his neighbour—men cease to be tools, and become independent reasoning beings. They are taught self-respect, and with this comes love of truth and of all those qualities which command the respect of their fellow-men; and they are taught that control of their passions which renders them averse to war; while the more sober occupations of life prevent the necessity of their seeking, in the wildness of excitement, that relief from monotony which so frequently drives other races into those excesses the world has had so often to deplore. The existence of caste, even in its most modified form, prevents individual ambition from having that unlimited career which, among other races, has so often sacrificed the public weal to the ambition of an individual.

LITERATURE.

The Aryan races employed an alphabet at so early a period of their history that we cannot now tell when or how it was introduced among them; and it was, even when we first become acquainted with it, a far more perfect alphabet than that of the Semitic races, though apparently formed on its basis. Nothing in it was dependent on memory. It possessed vowels, and all that was necessary to enunciate sounds with perfect and absolute precision. In consequence of this, and of the perfect structure of their language, they were enabled to indulge in philosophical speculation, to write treatises on grammar and logic, and generally to assume a literary position which other races never attained to.

History with them was not a mere record of dates or collection of genealogical tables, but an essay on the polity of mankind, to which the narrative afforded the illustration; while their poetry had always a tendency to assume more a didactic than a lyric form. It is among the Aryans that the Epos first rose to eminence, and the Drama was elevated above a mere spectacle; but even in these the highest merit sought to be attained was that they should represent vividly events which might have taken place, even if they never did happen among men; while the Celts and the Semites delight in wild imaginings which never could have existed except in the brain of the poet. When the blood of the Aryan has been mixed with that of other races, they have produced a literature eminently imaginative and poetic; but in proportion to their purity has been their tendency towards a more prosaic style of composition. The aim of the race has always been the attainment of practical common sense, and the possession of this quality is their pride and boast, and justly so; but it is unfortunately antagonistic to the existence of an imaginative literature, and we must look to them more for eminence in works on history and philosophy than those which require imagination or creative power.

ART.

These remarks apply with more than double force to the Fine Arts than to verbal literature. In the first place, a people possessing such a power of phonetic utterance never could look on a picture or statue as more than a mere subsidiary illustration of the written text. A painting may represent vividly one view of what took place at one moment of time, but a written narrative can deal with all the circumstances and link it to its antecedents and effects. A statue of a man cannot tell one-tenth of what a short biography could make plain; and an ideal statue or ideal painting may be a pretty Celtic plaything, but it is not what Aryans hanker after.

With Architecture the case is even worse. Convenience is the first thing which the practical common sense of the Aryan seeks, and then to gain what he desires by the readiest and the easiest means. This done, why should he do more? If, induced by a desire to emulate others, he has to make his building ornamental, he is willing to copy what experience has proved to be successful in former works, willing to spend his money and to submit to some inconvenience; but in his heart he thinks it useless, and he neither will waste his time in thinking on the subject, nor apply those energies of his mind to its elaboration, without which nothing great or good was ever done in Art.

In addition to this, the immaterial nature of their faith has always deprived the Aryan races of the principal incentive to architectural magnificence.¹ The Turanian and Celtic races always have

¹ Had there been no Pelægi in Greece, there probably would have been no Architecture of the Grecian period.

the most implicit faith in ceremonial worship and in the necessity of architectural splendour as its indispensable accompaniment. On the other hand, the more practical Aryan can never be brought to understand that prayer is either more sincere or more acceptable in one form of house than in any other. He does not feel that virtue can be increased or vice exterminated by the number of bricks or stones that may be heaped on one another, or the form in which they may be placed; nor will his conception of the Deity admit of supposing that He can be propitiated by palaces or halls erected in honour of Him, or that a building in the Middle Pointed Gothic is more acceptable than one in the Classic or any other style.

This want of faith may be reasonable, but it is fatal to poetry in Art, and, it is feared, will prevent the Aryans from attaining more excellence in Architectural Art at the present time than they have done in former ages.

It is also true that the people are singularly deficient in their appreciation of colours. Not that actual colour-blindness is more common with them than with other races, but the harmony of tints is unknown to them. Some may learn, but none feel it; it is a matter of memory and an exercise of intellect, but no more. So, too, with form. Other—even savage—races cannot go wrong in this respect. If the Aryan is successful in Art, it is generally in consequence of education, not from feeling; and, like all that is not innate in man, it yields only a secondary gratification, and fails to impress his brother man, or to be a real work of Art.

From these causes the ancient Aryans never erected a single building in India when they were pure, nor in that part of India which they colonized even after their blood became mixed; and we do not now know what their style was or is, though the whole of that part of the peninsula occupied by the Turanians, or to which their influence ever extended, is, and always was, covered by buildings vast in extent and wonderful from their elaboration. This, probably, also is the true cause of the decline of Architecture and other arts in Europe and in the rest of the modern world. Wherever the Aryans appear, Art flies before them; and where their influence extends, utilitarian practical common sense is assumed to be all that man should aim at. It may be so, but it is sad to think that beauty cannot be combined with sense.

Music alone, as being the most phonetic of the fine arts, has received among the Aryans a degree of culture denied to the others; but even here the tendency has been rather to develop scientific excellence than to appeal to the responsive chords of the human heart. Notwithstanding this, its power is more felt, and excellence is attained in this science more than any other. It also has escaped the slovenly process of copying, with which the unartistic mind of the Aryans has been content to fancy it was creating Art in other branches.

If, however, these races have been so deficient in the fine arts, they have been as excellent in all the useful ones. Agriculture, manufactures, commerce, ship-building, and road-making, all that tends to

accumulate wealth or to advance material prosperity, has been developed to an extent as great as it is unprecedented, and it promises to produce results which as yet can only be dimly guessed at. A great, and, so far as we can see, an inevitable revolution, is pervading the whole world through the devotion of the Aryan races to these arts. We have no reason to suppose but that it will be for good, however much we may feel inclined to regret that the beautiful could not be allowed to share a little of that worship so lavishly bestowed on the useful.

SCIENCES.

It follows, as a matter of course, that, with minds so constituted, the Aryans should have cultivated science with earnestness and success. The only beauty they, in fact, appreciated was the beauty of scientific truth; the only harmony they ever really felt was that of the laws of nature; and the only art they ever cared to cultivate was that which grouped these truths and their harmonies into forms which enabled them to be easily grasped and appreciated. Mathematics always had especial charms to the Aryan mind; and, more even than this, astronomy was always captivating. So, also, were the mechanical, and so, too, the natural sciences. It is to the Aryans that Induction owes its birth, and they probably alone have the patience and the sobriety to work it to its legitimate conclusions.

The true mission of the Aryan races appears to be to pervade the world with the useful and industrial arts, and so tend to reproduce that unity which has long been lost, to raise man, not by magnifying his individual cleverness, but by accumulating a knowledge of the works of God, so tending to make him a greater and wiser, and at the same time a humbler and a more religious servant of his Creator.

CONCLUSION.

WHEN Auguste Comte proposed that classification which made the fortune of his philosophy,—when he said that all mankind passed through the theological state in childhood, the metaphysical in youth, and the philosophical or positive in manhood,—and ventured to extend this theory to nations, he had a glimpse, as others have had before him, of the beauty, of the great harmony which pervades all created things. But he had not philosophy enough to see that the one great law is so vast and so remote that no human intellect can grasp it, and that it was only the little fragments of that great scheme which are found everywhere which man is permitted to understand.

Had he known as much of ethnographical as he did of mathematical science, he would have perceived that there is no warrant for this daring generalization; but that nations, in the states which he calls the theological, the metaphysical, and the philosophical, exist now and coexisted through all the ages of the world to which our historical knowledge extends.

What the Egyptians were when they first appeared on the scene they were when they perished under the Greek and Roman sway;—what the Chinese always were they now are;—the Jews and Arabs are unchanged to this day;—the Celts are as daringly speculative and as blindly superstitious now as we always found them;—and the Aryans of the Vedas or of Tacitus are very much the same sober, reasoning, unimaginative, and unartistic people as they are at this hour. Progress among men, as among the animals, seems to be achieved not so much by advances made within the limits of the group, as by the less finely organized races being superseded by those of a higher class;—and this, so far as our knowledge extends, is accomplished neither by successive creations, nor by the gradual development of one species out of another, but by the successive prominent appearances of previously developed, though partially dormant creations.

Ethnographers have already worked out this problem to a great extent, and arrived at a very considerable degree of certainty, through the researches of patient linguistic investigations. But language is in itself too impalpable ever to give the science that tangible, local reality, which is necessary to its success; and it is here that Archaeology comes so opportunely to its aid. What men dug or built remains where it was first placed, and generally retains the first impressions it received; and so fixes the era and standing of those who called it into existence: so that even those who cannot appreciate the evidence derived from grammar or from words, may generally see at a glance what the facts of the case really are.

It is even more important that such a science as Ethnology should

have two or more methods of investigation at its command. Certainty can hardly ever be attained by only one process, unless checked and elucidated by others, and nothing can therefore be more fortunate than the possession of so important a sister science as that of Archaeology to aid in the search of scientific truth.

If Ethnology may thus be so largely indebted to Archaeology, the converse is also true; and she may pay back the debt with interest. As Archaeology and Architecture have hitherto been studied, they, but more especially the latter, have been little more than a dry record of facts and measurements, interesting to the antiquary, to the professional architect, or to the tourist who finds it necessary to get up a certain amount of knowledge on the subject; but the utmost that has hitherto been sought to be attained is a certain knowledge of the forms of the art, and never to look at the study as that of one of the most important and most instructive of the sciences connected with the history of man.

Without this, the study of Architecture is a mere record of bricks and stones, and of the modes in which they were heaped together for man's use. Considered in the light of a historical record, it acquires not only the dignity of a science, but the especial interest of being one of those sciences which are most closely connected with man's interests and feelings, and the one which more distinctly expresses and more clearly records what man did and felt in previous ages, than any other study we are acquainted with.

From this point of view, not only every tomb and every temple, but even the rude monoliths and mounds of savages, acquire a dignity and interest to which they have otherwise no title; and man's works become not only man's most imperishable record, but one of the best means we possess of studying his history, or of understanding his nature or his aspirations.

Rightly understood, Archaeology is as useful as any other branch of science or of art, in enabling us to catch such glimpses as are vouchsafed to man of the great laws that govern all things; and the knowledge that this class of man's works is guided and governed by those very laws, and not by the chance efforts of unmeaning minds, elevates the study of it to as high a position as that of any other branch of human knowledge.

I N D E X.

ADAM.

A.

- Adam*, Rabert, [292](#).
Adelphi, London, theatre, the dimensions of, [452](#).
Alberti, Leon Battista, [40](#), [42](#), [46](#), [75](#), [86](#).
Alcala, university at, [147](#), [148](#). Paraimfo, state apartment in, [149](#), [150](#). Court of archiepiscopal palace at, [148](#).
Alcazar, Toledo, [153](#). External façade of, [154](#).
Alessi, Galeazzo, [70](#), [72](#), [118](#), [119](#), [121](#).
Alexandra, theatre, St. Petersburg, the dimensions of, [457](#).
Amanati, [85](#).
Amboise, castle of, [194](#).
America, architecture, introduction of classic styles by Spaniards, [431](#). Mexico, [431-434](#). Peru, [434-436](#).
America (North), architecture of, [436](#), [437](#). Washington, [437-443](#). Ecclesiastical architecture of, [443-445](#).
Ammunati, Bartolomeo, [110](#).
Amersbury House, elevation of, [234](#).
Amsterdam, stadthaus at, [373](#). Oude Kerk at, [374](#). Nieuwe Kerk at, [374](#).
St. Andrea, Mantua, plan of church of, [44](#). Section and elevation of porch, [45](#).
Angelo, Michael, [11](#), [54](#), [57](#), [59](#), [68](#), [70](#), [76](#), [100](#), [104](#), [106](#), [111](#), [124](#), [201](#).
Sta. Annunziata, Genoa, plan of church of, [79](#). View, interior of, [80](#).
Antwerp, Hôtel de Ville at, [369](#). Front elevation of, [370](#). San Carlo Borromeo at, [370](#). Theatre, the dimensions of, [492](#).
Aranjuez, palace at, [155](#).
Arches, triumphal, France, in, [235-239](#). Germany, deficiency in, [340](#).
Architecture, modern styles, introduction to, history of, [138](#). Causes of change in: Revival of classical literature, [47](#). Reform in religion, [7-10](#). Painting and sculpture, [10-17](#). Typical examples of change, [24-35](#). Remarks on history of, [488-491](#).
Architects, Italian, France, in, [161](#).
Arena, Padua, chapel of, [10](#), [11](#).
Aristotile, Bastiano, [88](#).
 —, Francesco, [88](#).
Arnolfo, [40](#).
Art, technic and phonetic forms of, [17-24](#). Ethnography of, [35](#), [36](#). Ferro-vitreous, [482-484](#).

BOLSOVER.

Argan race, the, [519](#). Religion of, [520](#), [521](#). Government of, [521-523](#). Morals of, [523](#). Literature of, [523](#), [524](#). Arts and sciences of, [524-525](#).
Audley Inn (or End), [259](#).

B.

- Baccio*, [88](#).
Baeza, Carcel del Corté at, [157](#), [158](#).
Balbi, Genoa, palace of, [122](#).
Balzan, [428](#).
Barbarano, Vicenza, palace, design of, [115](#).
Barberini, Rome, palace, cortile of, [111](#). View of, [112](#).
Barbieri, [457](#).
Barcelona, Lonja at, [156](#).
Barry, Sir Charles, [309](#), [310](#), [311](#), [326](#).
Bartolini, Florence, palace of, [88](#).
Basilicas, Rome, at, [52](#), [65](#). Vicenza, [117](#). Munich, [344](#).
Basilican churches in Italy—Exterior of, [77-77](#). Interiors of, [77-81](#).
Begun Kotie, Lucknow, the, [420](#). View of, [421](#).
Bell Rock, lighthouse of, [477](#).
Benares, college at, [416](#).
Bengal, domestic buildings of, [417](#).
Berlin, cathedral at, [335](#). Church and theatre, view of, at, [336](#). Schloss at, [339](#). Brandenburg Thor at, [340](#). Arsenal at, [340](#). The public library at, [340](#). University at, [340](#). Architecture of, [351](#). Werder Kirche at, [351](#). Plan of museums at, [353](#). View of new museum at, [354](#). Theatre at, [355](#); dimensions of, [492](#). Guard-house at, [355](#). Building-school at, facade of, [356](#). New Exchange at, [357](#). Elegance of domestic buildings in, [357](#). View of group of houses at, [358](#). Palace of Count Pourtales at, [358](#). Opera-house at, [448](#); dimensions of, [457](#), [462](#). Victoria theatre at, plan of, [469](#). View of summer auditory of, [470](#). Schinkel's theatre at, plan, &c., of, [471](#).
Berna, Federal Palace at, [365](#). View of, [366](#).
Bernini, [59](#), [111](#), [212](#).
Berruete, [152](#).
Birmingham, music-hall at, [472](#).
Blenheim Palace, plan of, [284](#). Lesser garden front of, [285](#).
Blois, castle of, [194](#).
Blondel, [235](#).
Bolsover House, [252](#).

BOMBAY.

- Bombay*, domestic buildings of, [417](#).
Bordeaux, theatre at, [148](#); dimensions of, [467](#). Plan and façade of, [463](#). Section of military of, [464](#).
Borghese, Rome, palace, façade of, [110](#).
San Carlo Borromeo, Vienna, plan of church of, [355](#).
 —, Antwerp, church of, [370](#).
Borromini, [67](#), [111](#).
Bosphorus, the Sultan's palace on, [428](#).
Botticelli, [13](#), [31](#).
Boulogne, new cathedral at, [30](#). Colonne de la Grande Armée at, [234](#).
Bourbon, Paris, palais, the, [219](#). Remodelling of, [223](#). Old pavilion of, [224](#).
Bourse, the, Paris, view of, [224](#). Position and effect of, [225](#).
 —, Lyons, view of, [229](#).
 —, Marseilles, [230](#).
 —, St. Petersburg, [400](#).
Box Church, London, steeple of, [275](#).
Bouman, [235](#).
Bradford, music-hall at, [472](#).
Bramante, [46](#), [47](#), [53](#), [54](#), [57](#), [62](#), [101](#), [102](#), [103](#), [126](#).
Brandenburg Thor, Berlin, [340](#). View of, [341](#).
Bregno, Antonio, [90](#).
Breca, Milan, palace of, [127](#).
St. Bride's, London, steeple, &c., of church of, [276](#).
Bridgewater House, park front of, [311](#).
Brignola (Little), Genoa, palace of, [122](#). View of, [123](#).
British Museum, London, plan of portico of, [304](#).
Britton, John, [317](#), [321](#).
Broletto, Milan, palace, the, [127](#).
Brosse, De, [224](#).
Bruges, St. Anne's church at, view of, [371](#).
Brunelleschi, Filippo, [49](#), [41](#), [68](#), [85](#).
Brunswick, house at, [26](#).
Brussels, architectural buildings of, [372](#). Royal palace at, [372](#).
Bullant, [235](#).
Burg, the, Vienna, [331](#).
Burgoyne, [50](#).
Burleigh House, [252](#).
Burton, [302](#).
Bury, château de, near Blois, plan of, [193](#). View of, [195-208](#).

C.

- Cairo*, great mosque in citadel at, [425](#).
Calais College, Cambridge, Gate of Honour of, [247](#).
Calcutta, Government-house at, [412](#), [413](#). Town-hall at, [413](#). Mastimère at, [413](#). Metcalfe Hall at, [413](#). External view of cathedral at, [414](#). Interior view, [415](#). The Fort church at, [415](#). Houses of, [417](#).
Calvary, New York, church of, [443](#).
Cambridge, King's College chapel at, [13](#).
Calus College, Gate of Honour of, [247](#).

CONTIN.

- St. Peter's College* at, [247](#). Clare College, court at, [248](#). Trinity College, Neville's Court at, [248](#), [280](#), [303](#). College of Downing at, [303](#). Fitzwilliam Museum, front view of, at, [305](#).
Camertinghi, Venice, end elevation, palace of, [94](#).
Campbell, Colin, [286](#).
Cancellaria, Rome, façade of palace of, [102](#).
Capitals, bracket, Spain, examples in, [148](#), [149](#).
Capra, villa near Vicenza, [115](#). View of, [118](#).
Capraro's, near Rome, plan and view of palace of, [108](#), [109](#).
Carcel del Corté, Baeza, view of, [157](#).
Carega, Genoa, façade of palace of, [121](#).
Carignano, Genoa, façade of church of, [70](#).
Carita, de la, Venice, convent of, [97](#).
Carlo Felice, Genoa, theatre at, dimension of, [457](#).
San Carlo, Milan, church of, [71](#). View of, [72](#).
 —, Naples, theatre, the dimensions of, [457](#), [459](#).
Carlsruhe, theatre, the dimensions of, [462](#).
Carr, [295](#).
Caserta, Naples, palace of, [127](#). Façade of, [128](#).
St. Catherine, St. Petersburg, church of, [388](#).
Celtic race, the, [514](#). Religion and government of, [515](#). Morals and literature of, [516](#). Arts and sciences of, [517](#), [518](#).
Certosa, Pavia, western façade, church of, [51](#).
Chulgrin, M., [236](#).
Chambers, Sir William, [280](#).
Chambord, château, plan of, [190](#). View of, [191](#). Roof of, [192](#).
Charlton House, [252](#).
Châteaur, architecture, France, of, [189](#).
Chelsea Hospital, [279](#).
Chepstow, tubular bridge at, [476](#).
Chester, Dee bridge at, dimensions, plan, &c., of, [475](#), [476](#).
Chiericate, Vienna, elevation, palace of, [114](#).
Chiswick, villa at, [262](#).
Chutter Munsil, Lucknow, [420](#).
Clare College, Cambridge, court of, [248](#).
Claveri, [335](#).
St. Clothilde, Paris, church of, [181](#).
Colloredo, Mantua, palazzo of, [124](#).
Cologne, porch of Rathaus at, [337](#).
Colonne de la Grande Armée, Boulogne, the, [234](#).
 — de Juillet, Paris, the, [234](#), [235](#).
Columns, France, in, [234](#), [235](#). St. Petersburg, Emperor Alexander, monolithic column at, [406](#).
Colzean Castle, [314](#).
Constantia, Lucknow, mansion of, [418](#). View of, [419](#). Tomb in, [420](#).
Constantinople, St. Sophia at, [423](#). New palace at, [428](#). View of new palace, [429](#).
Contini, J. B., [140](#).

COPENHAGEN.

- Copenhagen*, view, &c., of, Exchange at, [374](#), [375](#), [376](#).
Cornaro (the original), Venice, palace of, [92](#), [94](#).
Cortile, the, introduction in English buildings, [310](#).
Courtyards, Genoese, palaces of, [122](#).
Cronaca, [85](#).
Crystal Palace, the, [472](#), [482-484](#).

D.

- Dance*, [295](#).
Dantzig, house at, [359](#).
Darmstadt, Opera-house, the dimensions of, [457](#).
Decorution, Jesuit style of, [169](#). Louis Quatorze style of, [220](#), [221](#).
Delhi, pavilion at, [421](#). Audience hall of Shah Jehan at, [421](#).
St. Denis, Porte, Paris, arch of, [235](#), [236](#).
Denmark, round-arched Gothic style in, [374](#). Architecture of, [374](#), [375](#).
Dijon, cathedral at, [162](#). Façade of, [163](#).
 —, Hotel Voguë at, [198](#).
Dogana, Venice, palace of, [69](#), [99](#).
Domes, Mediæval, Italian Renaissance, copies of, [50](#).
 —, Italy, in, [68](#).
Domestic architecture, France, in, examples of, [231-233](#).
Domical churches, Italy, in, [68-72](#).
Dom, Salzburg, church of, [336](#).
Doria Tursi, Genoa, view of palace of, [120](#).
Dresden, Liebfrauen Kirche at, [333](#), [334](#). Hof Kirche at, [335](#). Zwirner palace at, [338](#). Japanese palace at, [339](#). New theatre and picture gallery at, [360](#).
Du Cerceau, [202](#), [204](#).
The Duke's, first permanent theatre in London, [448](#).
St. Dunstan's in the East, London, church of, [278](#).
Duperac, [204](#).
Durazzo, Genoa, palazzo, the, [119](#). View of, [120](#).

E.

- Eddystone*, lighthouse of, [477](#).
Edin'burgh, Heriot's Hospital, gateway at, [253](#). College at, principal façade of, [293](#). Royal Institution at, [308](#). New High-school at, [308](#), [309](#). York-place chapel at, [321](#). Cathedral at, [321](#).
Eglinton Castle, [314](#).
Elliot, [314](#).
Elsinore, castle of, [376](#).
Engineering, Civil, [474-482](#). Military, [484-487](#).
England, Renaissance styles in, introduction to history of, [242-245](#). Transition style in, examples of, [246-255](#).
 —, Renaissance architecture of:—Inigo Jones, [256-265](#). Wren, [265-281](#). 18th century, [282-296](#). Classical Revival in,

FRANCE.

- [297-312](#). Steps which led to Revival in, [298](#). Gothic Revival, [313](#). Causes which led to, [317](#). Advantages of Gothic style in, [319](#).
Entablature, placing of, over colonnades, [288](#), [289](#). Diagram, showing reversion of, [289](#).
Escorial, the, commencement of, [141](#). Plan of, [142](#). Bird's-eye view of, [143](#). Section through church and atrium of, [144](#). Courts of, [144](#), [145](#). Church of, [146](#). Dimensions and materials of, [146](#), [147](#).
Ethnology, architectural point of view from, introduction to, [493-498](#). Races, classification of, &c., [499](#), [500](#). Turanian race, [501-507](#). Semitic race, [508-513](#). Celtic race, [514-518](#). Aryan race, [519-526](#). Remarks on, [527](#), [528](#).
St. Etienne, Paris, church and roodscreen of, [167](#).
Europe, North-western, Renaissance architecture of, [368-379](#):—Belgium, [368-372](#). Holland, [373](#), [374](#). Denmark, [374-376](#). Hamburg, [376](#), [377](#). Sweden and Norway, [377-379](#).
St. Eustache, Paris, plan of church of, [166](#). Bay of, [167](#).
Exeter Hall, London, [472](#).

F.

- Façades*, Italian churches, their importance and treatment in, [50](#), [73-77](#).
Fancelli, Luca, [85](#).
Farnese, Rome, plan of palace of, [104](#). Front of, [105](#).
Farnesina, near Rome, villa of, [103](#).
Fenice, Venice, theatre, the dimensions of, [487](#).
Filarete, [125](#).
Fischer, Johann, [335](#).
Fitzwilliam, Cambridge, Museum, front view of, [305](#).
Flamboyant style, France, in, [162](#).
Florence, San Lorenzo, at, [41](#). Santo Spirito, at, [41](#), [42](#). Secular Architecture of, [83-89](#). Riccardi palace at, [83](#), [84](#). Pitti palace at, [83](#), [85](#). Strozzi palace at, [85](#). Rucellai palace at, [86](#). Gondi palace at, [87](#). Guadagni palace at, [87](#), [88](#). Nicolini palace at, [87](#). Bartolini palace at, [88](#).
Fontainebleau, palace at, [189](#).
Fontana, Domenico, [59](#), [66](#).
Fonthill Abbey, commencement, &c., of, [314](#). View of, [315](#).
Forbes, Colonel, [414](#).
Förster, L., [362](#).
San Francesco, Rimini, view of church of, [43](#).
France, Renaissance Architecture, introduction into, [161](#). Gothic feeling in examples of, [162](#), [163](#). Ecclesiastical Architecture of, [166-182](#). Secular Renaissance Architecture, history in eras of:—Era of Francis I., [183-200](#). Age of Henri Quatre, [201-206](#). Louis Quatorze, [207-222](#). The period of the Empire, [223-231](#). Châteaux

FREDERICKSBURG.

- of, 189. Domestic Architecture of, 231-233. Trophies and tombs of, 234-239.
Fredericksborg, castle of, 375, 376.
Farrah Buksh, Lucknow, the, 420.

G.

- Gaillon*, château, portion of façade of, 203.
Galilei, Alessandro, 67.
San Gallo, Antonio, 56, 57, 59, 62, 70.
Gärtner, 343.
St. Genevieve (or *Pantheon*), commencement and dimensions of church of, 175. Plan of, 176. Section of dome, 177. West front of, 178. Internal arrangement, &c., 179, 180. Library of, 228.
Genoa, Carignano church at, 70. *Sta. Annuncinta* at, 79, 80. Architecture, 118-123. Palaces of, their merits and materials, 119. *Tursi Dorin* palace at, 120. Royal palace (formerly *Durazzo Marcello*) at, 121. *Carega* palace at, 121. *Sauli* palace at, 121. Palaces, their peculiarities in painting, and courtyards of, 122. Their position and effect, 123. *Bulbi* palace at, 122. *Mari* palace at, 122. *Little Brignola* palace at, 122, 123. *Carlo Felice* theatre at, 457, 459.
St. George's, Bloomsbury, London, church of, 282.
 — in the East, London, church of, 283.
 —, Liverpool, Hall. Dimensions of, 305. Plan of, 305. View of, 307.
St. Germain en Laye, palace of, 195.
Germany, history of Renaissance Architecture, introduction to, 330, 331. Ecclesiastical Architecture of, 332-336. Secular Architecture of, 336-341. Revival, 342-367.
Ghirlandajo, 13.
Giambattista, 141.
Gibbs, James, 288.
Giorgio, Francesco di, 87.
Giotto, 40.
Giovanni di Padua, 246.
Giraud, Rome, palazzo of, 102.
Sta. Giustina, Padua, church of, 81.
Glasgow, Assembly Rooms at, 293. Roman Catholic cathedral at, 321.
Glyptothek, Munich, the, view of, 347; plan of, 348.
Goz, churches and cloisters at, 410.
Gondi, Florence, palace of, 87.
Grace Church, New York, ornamentation and view of, 443, 444.
Granada, cathedral at, 133; plan of, 134. Palace of Charles V. at, 152, 153.
Grange House, the, 307. View of, 308.
Gran, cathedral at, 34.
Rite Grec, St. Petersburg, half-elevation, half-section, church of, 338.
Greenwich, hospital at, 263, 279.
Griefswald, house in, 25.
Grimani, Venice, palace of, 27, 24.
Gundagni, Florence, palace of, 87, 88.

ISAAC.

- Guarenghi*, 395, 400.
Guarini, 127.
Gumiel, Pedro, 147.

H.

- Hamburgh*, Street and Domestic Architecture of, 377. Post-office at, 377. National Society's buildings at, 377. Theatre, the dimensions of, 462.
Hamilton, 308.
Hampton Court, palace of, 279. *Walsey's* palace at, 279.
Hurdwicke Hall, 252.
Harewood House, 295.
Hartley, Mr., 475.
Hatfield House, 252.
Hawe, Theodore, 246.
Hackmoor, 282.
Heidelberg, castle at, 337.
Heriot's Edinburgh hospital, gateway of, 253.
Herrera, 141, 156.
Historique, Paris, theatre, the dimensions of, 462. Plan, &c., of, 465.
Hof Kirche, Dresden, of, 335.
Holkham House, façade of, 295.
Holland, 302.
 —, Renaissance Architectural buildings of, 373.
 — *House*, 252.
Holt, Thomas, 248.
Hontanon, Rodrigo Gil, 133, 147.
 —, Gil de, 133.
Hotels, Paris, external appearance, &c., and defects of, 217-219. *Hôtel de Ville*, 196. New buildings of, 228. *Hôtel de Rohan*, 218. *Hôtel Soubise*, 217, 218. *Hôtel de Noailles*, 218.
Hôtel Voyuë, Dijon, window-head of, 198.
 — *de Ville*, Antwerp, 369. Front elevation of, 370.
Howard Castle, elevation of park-front of, 286.

I.

- San Idelfonso*, palace of, 156.
India, Renaissance Architecture, how introduced in, 408, 409. By Portuguese, 408-411. The Spaniards, Dutch, and French, 411. By English, 412-417. Native Renaissance Architecture, 417-422. Examples of, 418.
Infanta, Zaragoza, palace of the court in, 151.
Invalides, Paris, church, plan of dome of, 170. Section of dome, 171. Façade of dome, 172. Dimensions of, 173. Crypt, cost of, 239.
Inverary Castle, 314.
St. Isaac, St. Petersburg, church, site and commencement of, 389. Plan and dimensions of, 390. North-east view of, 391. Porticoes, &c., of, 392. Half section of

ISIDRO.

- dome of, 393. Materials, internal arrangements, &c., of, 393-395.
San Isidro, Madrid, chapel, ornamentation of, 140.
Italiana, Paris, theatre, the dimensions of, 462.
Italy, Ecclesiastical Architecture of, 39-80. Churches anterior to St. Peter's, 39-52. St. Peter's, 52-65. Churches subsequent to St. Peter's, 65-68. Domical churches, 68-72. Basilican churches, exterior, 73-77. Basilican churches, interior, 77-81. Secular Architecture of, 82-130. Florence, 83-89. Venice, 89-100. Rome, 100-112. Vicenza, 112-118. Genoa, 118-123. Mantua, 123, 124. Milan, 125-127. Turin and Naples, 127, 128.
Ira, 71, 72.

J.

- Jaen*, capital of, cathedral at, 135.
St. James (Piccadilly), London, church, view of interior of, 277.
 —, London, music hall, 472.
Japanese palace, Dresden, view of, 339.
Jeune, Le, 232.
St. John's, Oxford, College, garden front of, 248.
Jones, Inigo, 242, 246-286.

K.

- Kaiser Bagh*, Lucknow, 420.
Kasan, Our Lady of, St. Petersburg, church of, 386. Plan of, 387.
Keddystone Hall, ground-plan and garden front of, 284.
Kent, 257, 287.
King's College, Cambridge, chapel of, 13.
Kittoe, Captain, 416.
Klenze, 345, 360, 402.
Klosterneuburg, convent of, 364.
Kohorin, 460.
Kustenburg, German spire at, 237.

L.

- Lambton*, castle of, 314.
Laterano, San Giovanni, Rome, church of, 65. Lateral porch of, 66. Façade of, 67.
Leeds, music hall at, 472.
Lemercier, 204, 212.
Leoni, Leone (otherwise Chevalier Aretino), 126.
Lescot, Pierre, 185.
Levan, 210.
Liebfrauen Kirche, Dresden, plan of, 333. View of, 334.
Liverpool, St. George's Hall at, 305-307. Music hall at, 472.
Lodi, church at, plan, 46. Section of, 47. Elevation of, 48.

LUPIANA.

- London*, Whitehall palace at, Inigo Jones's designs for and diagrams of, 257, 258. Banqueting-house at, 260. (Old) St. Paul's cathedral at, 260. St. Paul's at, plans, elevations, exterior, and internal arrangement of, 266-274. St. Paul's (Covent Garden) at, 261. Bow church at, 275. St. Bride's at, 276. St. James's (Piccadilly) at, 277. St. Dunstan's (in the East) at, 278. St. Michael's (Cornhill) at, 278. Chelsea hospital at, 279. Monument at, 280. College of Physicians at, 280. St. George's (Bloomsbury) at, 282. St. George's (in the East) at, 283. St. Mary (Woolnoth) at, 283. Treasury buildings at, 287. St. Martin's (in the Fields) at, 218. Somerset House at, 290, 291. Mansion House at, 295, 296. St. Pancras new church at, 299, 300. Bank of England at, 301, 302. University at, 303. National Gallery at, 304. British Museum at, 304. Travellers' Club at, 309. College of Surgeons at, 309, 310. Reform Club at, 309, 310. Parliament Houses at, 311, 312, 323, 326. St. Luke's, Chelsea, 321, 322. The Duke's first permanent theatre at, 448. Opera House at, 448, 457, 460. Covent Garden Theatre at, 448-457. Drury Lane Theatre at, 448, 462, 467. Lyceum Theatre at, 461. Adelphi Theatre at, 462. Exeter Hall at, 472. St. James's Hall at, 472. St. Martin's Hall at, 472. London Bridge at, 476. Waterloo Bridge at, 476. King's Cross Railway Station at, 478, 479.
Longford Castle, 252.
Loughena, Baldassarre, 68, 90.
 —, Ludovico, 159.
Longleat House, plan of, 249. Elevation of part of, 250.
Lonja, Barcelona, the, 156.
San Lorenzo, Florence, church of, 41.
Lorne, Philibert de, 201, 202, 203.
London Castle, 314.
Louis, Victor, 448.
St. Louis and St. Paul, Paris, façade of church of, 168. Commencement, &c., of, 169.
Louvre, Paris, the, rebuilding of, 185. Plan of, 186. Part of court, 187, 188. Part of gallery of, 204. Completion of, 212, 213. Eastern façade and plan of façade of, 214. Central compartment, northern façade of, 215. View of angle of the Cour Napoleon of, 227.
Lothar Castle, 314.
Lucknow, Constantin mansion at, 418, 419, 420. The Furrak Buksh at, 420. Chutter Munsil at, 420. Kaiser Bagh at, 420. Begum Kotie at, 420.
St. Ludwig, Munich, church of, 343.
Luine, A., 233.
St. Luke's (Chelsea), London, church of, 321. West front of, 322.
Lungbi, Martino (the elder), 110.
Lupiana, cloistered court in monastery of, 150.

LUXEMBOURG.

- Luxembourg*, Paris, palace of, 204. Additions to and plan of, 205. Elevation of, 206.
Lyceum, London, theatre, the dimensions of, 462.
Lyons, new Bourse at, 229. Theatre at, 448. Dimensions of, 462, 464. Plan of, 465.

M.

- Macao*, Jesuits' church at, façade of, 410.
Machuca, 152.
Madama, Rome, villa of, 106.
Madeleine, Paris, church of, 180. Plan of, 181.
Moderno, Carlo, 59, 111.
Madras, domestic buildings of, 417.
Madrid, San Isidro, chapel at, 140. Royal palace at, 154, 155. Museo at, 156. Theatre at, dimensions of, 457.
 —, Paris, château of, 192.
Mafra, convent at, 159. View of, 160.
Majgiore, San Giorgio, Venice, plan of church of, 75. Interior of, 78.
Maisons (near Paris), château de, 216.
Majano, Giuliano de, 100.
Malaga, Puerta de las Cadenas, cathedral of, 136.
Malta, Monsta church in, 32.
Manchester, music hall at, 472.
Mansard, François, 170, 209, 212, 215.
 —, Jules Hardouin, 172, 209, 219.
Mansion House, London, 295, 296.
Mantua, church, St. Andrea at, 44, 45. St. Sebastian at, 46. Palazzo del Te at, 123, 124. Palazzo Colloredo at, 124.
Mari, Genoa, palace of, 122.
Sta. Maria, Milan, church of, 48. View of, 49.
St. Mark, Venice, library of, 95. End elevation of, 96.
Marot, 212.
Marseilles, New Exchange at, 230. Arch at, 235. Theatre at, 462.
Martin, General, 418, 419, 420.
 —, Porte St., Paris, arch of, 235.
St. Martin's, London, music hall of, 472.
 — (in the Fields), London, interior view of church of, 278.
St. Mary's (Woodnoth), London, church of, 283.
Massimi, Pietro, Rome, palace of, 103.
 —, Angelo, Rome, palace of, 103.
Meyence, theatre at, dimensions of, 462. Plan and section and arrangement of, 468.
Menai Strait, tubular and suspension bridges at, 476.
Mercier, Le, 170.
Meudon, palace at, 215. Garden front of, 216.
Mexico, cathedral, site and commencement of, 431. External view of, 432. View of side-aisle in, 433. Cloisters of monastic establishments at, 433, 434.

ORDERS.

- St. Michael's* (Cornhill), London, church of, 278.
 —, Munich, church, plan, and section of, 332.
San Michele, 90, 94, 485.
Michelozzo, 83, 85.
Milan, Santa Maria delle Grazie at, 49. San Carlo at, 71, 72. Architectural magnificence, deficiency of examples at, 125. Ospedale Grande at, 125, 126. Palace Casa Rotta at, 126. Brera palace at, 127. Broletto palace at, 127. The Scala theatre at, 448, 457, 458.
San Simone Minor, Venice, church of, 69.
Modlin, granary at, 486. Central compartment and façade of, 487.
Mölk, church at, 336. Convent of, 364.
Montferrand, Chevalier de, 389, 394, 395.
San Pietro Montorio, Rome, church of, 49.
Monument, the, London, 280.
Moscone, sliding-house at, span of roof of, 401. Theatre at, 459.
Monsta church, Malta, plan and section of, 32. View of, 33.
Müller, 332.
Munich, church St. Michael at, 332. Cathedral at, 336. Ecclesiastical Architecture of, 343. St. Ludwig at, 343. The Aue Kirche at, 344. Basilica at, 344. The Walhalla at, 345, 346. Ruhmes-Lulle at, 347. Secular Architecture of, 347. Glyptothek at, 347, 348. The Pinacothek at, 348, 349. Royal palace at, 350. Public library at, 350. The University, the Blind School, War Office, and palace of Prince Lichtenstein at, 350. Theatre at, 457. Plan and external appearance of, 462.
Museo, Madrid, the view of, 156.
Music halls, in England, 472, 473.

N.

- Naples*, Caserta palace at, 127, 128. San Carlo theatre at, 457, 459.
Nash, 302, 316.
National Gallery, London, 304.
Nauvoo, Mormon temple at, 444.
Newcastle, façade of railway station at, 481.
Newgate prison, front elevation of, 286.
St. Alexander Newski, St. Petersburg, monastery and church of, 384, 385, 386.
New York, Grace church at, 443, 444.
 Calvary church at, 443. Holy Redeemer church at, 443, 444.
Nicholai church, Potsdam, view of, 352.
St. Nicholas, St. Petersburg, plan of church, 380.
Nicolini, Florence, palace of, 87.
Nieuw Kerck, Amsterdam, 374.
Novosieliski, 448.

O.

- Ohio*, State Capitol of, 442.
Olympico theatre, Vicenza, 446.
Orders, the, Italy, their treatment in, 75, 76. How originally used in Greece, 78.

ORLEANS.

- Orleans*, house of Agnes Sorel nt, [197](#).
Ossoli, Rome, palace of, [103](#).
Oude Kerck, Amsterdam, [374](#).
St. Owen, Rouen, church of, [182](#).
Orford, St. John's College, front of, [248](#).
 Gateway of schools, [348](#). Sheldonian Theatre at, [265](#), [279](#). Radcliffe Library at, [289](#), [290](#). New Museum at, [327](#).

P.

- Pachas*, Arenn chapel at, [10](#), [11](#). Cathedral at, [81](#). Chnreh Sta. Giustina at, [81](#).
 —, John of, [249](#).
Pagodas, Tanjore, of, [418](#).
Painting, Italy, pre-eminence in, [10](#). Renaissance age, art par excellence of, [50](#).
Palladio, 28, 75, 76, 90, 97, 107, 112, 114, 115, 117, 124, 242, 446.
Palma, Rome, palace of, [105](#).
St. Pancras, London, new church of, [299](#). West elevation of, [300](#).
Panofolini, Florence, palace of, [87](#).
Paris, church St. Eustache at, [166](#), [167](#). St. Etienne nt, [167](#). St. Paul and St. Louis at, [168](#). Sorbonne at, [170](#). Invalides church at, [170-173](#). St. Sulpice nt, [173](#), [174](#). St. Geneviève at, [175-180](#). Madeleine at, [180](#), [181](#). Basilican church St. Vincent de Paul nt, [181](#). St. Clothilde at, [181](#). Louvre palace at, [185-189](#). Pavillon de l'Horloge at, [187](#). Châteaux Madrid at, [192](#). Hôtel de Ville, [196](#). The Tuileries at, [201-203](#). Pavillon Flore of the Tuileries at, [204](#). Luxembourg palace nt, [204-206](#). Louvre palace nt, [212-215](#). Château de Maisons near, [216](#). Hotels, street fronts of, [217](#). Hôtel Soubise at, [217-218](#). Hôtel de Rohan at, [218](#). Hôtel de Noailles at, [218](#). The Great Trianon Palace at, [219](#). Arrangement of houses in, [219](#). Palais Bourbon at, [219](#). Old Pavillion of, [224](#). The Bourse nt, [224](#), [225](#). Street architecture of, [225](#), [226](#). Louvre, new buildings of, [226](#), [227](#). Library of St. Geneviève at, [228](#), [229](#). House Rue Soufflot at, [231](#). Houselue des Sausaies nt, [232](#). House Rue Navarin at, [233](#). Colonne de Juillet at, [234](#), [235](#). Arch of Tuileries at, [235](#). Arch Porte St. Denis at, [235](#), [236](#). Arch Porte St. Martin at, [235](#). Arc de l'Etoile, [236](#), [237](#). Entrance to the Ecole Polytechnique at, [238](#). New Russian church, view of, at, [405](#), [406](#). Hôtel de Bourgoyne, theatre at, [448](#). Palais Royal, theatre at, [448](#). Dimensions Académie de Musique at, [457](#); plan and section of, [460](#), [461](#). The theatre at, [461](#). Théâtre Historique at, [462](#), [465](#). Théâtre Italiens at, [462](#). Strasbourg railway station at, [480](#).
Parliament Houses, London, [311](#), [312](#), [323](#). Plan of, [324](#). River front of, [325](#). Victoria tower, &c., [326](#); *Frontispiece*.
Parma, opera-house at, dimensions of, [457](#), [459](#).

PLAYFAIR.

- St. Paul's*, Rome, Old Basilica of, [65](#).
 —, Vincent de, Paris, Basilican church of, [181](#).
 —, Covent Garden, London, east elevation of, [261](#).
 — (Old), London, repairs to, &c., [261](#).
 —, London, plan as originally designed, [266](#). Side elevation of, [267](#). Plan of present cathedral, [270](#). Half elevation of dome, [271](#). Whispering gallery, &c., and exterior and internal arrangement, [271-274](#). West view of, [274](#).
Paria, Certosa near, [50](#), [51](#).
Parton, Sir Joseph, [482](#).
Pelegrini, Verona, fragment from the chapel of, [17](#).
Pervault, [213](#).
Perugino, [13](#).
Peruzzi, Baldassare, [55](#), [56](#), [59](#), [101](#), [102](#), [103](#).
Pesaro, Venice, palace of, [98](#), [99](#).
Peth, Jews' synagogue at, [362](#), [363](#).
St. Peter's, Rome, Old Basilica of, [52](#).
 —, Rome, plan as proposed by Bramante, [53](#). By San Gallo, [55](#). East front, San Gallo's design, [56](#). Arrangement of aisles, ditto, [57](#). Plan as it now exists, [58](#). Western apse, [60](#). East front, [61](#). Dome of, [62](#). Section of, [63](#). Materials and decoration of, [60](#). Atrium of, [64](#).
 —, Cambridge, college of, [247](#).
Petersburgh, St., church in the citadel at, [383](#), [384](#). Smolnoy, monastery and church at, [384](#). St. Alexander Newski, monastery at, [384-386](#). St. Nicholas nt, [386](#), [387](#). Our Lady of Kasan at, [386](#), [387](#). Du Rite Grec at, [388](#). St. Catherine's at, [388](#). Zamenie at, [388](#). St. Isaac at, [389-395](#). Secular Architecture of, [395](#). Palaces of, [395](#). Winter Palace at, [395](#), [396](#). Hermitage Palace at, [397](#). Archduke Michael's palace at, [397](#), [398](#). Admiralty at, [398](#), [399](#). The Bourse at, [400](#). Etat Major at, [400](#). Institutions des Demoiselles Nobles and Military Orphans at, [400](#). Barracks at, [400](#). Academy of Beaux Arts at, [400](#). The library at, [400](#). Medical School at, [401](#). Riding-houses at, [401](#). The Bank at, [401](#). Foreign-office at, [401](#). War-office nt, [401](#). New Museum at, [402-404](#). Statue of Peter the Great at, [406](#). Emperor Alexander column at, [406](#). Opera house at, [457](#), [459](#). Alexandra theatre at, [457](#), [459](#).
Philadelphia, Girard College at, [441](#), [442](#). Bank at, [442](#). Exchange at, [442](#).
Physicians, London, College of, [280](#).
Piccolomini, Sienna, palace of, [87](#).
Piermarini, [448](#), [457](#).
Pilar del Zaragoza, cathedral, plan of, [138](#). View of, [139](#).
Pinacothek, Munich, half section of, [349](#).
Piatelli, Baccio, [11](#), [100](#).
Pitti, Florence, cornice of palace of, [85](#).
Playfair, [293](#).

POLYTECHNIQUE.

- Polytechnique*, entrance, the Ecole, Paris, arch of, 238.
Ponte, Antonio da, 97.
Porta, 401.
Portugal, architecture of, 159, 160.
Poyet, 223.
Potsdam, palace at, 340. Nicolai church at, 352.
Prague, German spire at, 364.
Procuratie Vecchie, Venice, palace of, 92.
Pugin (the elder), 317, 318.
 — (the younger), 317, 318, 321.

R.

- Radclyffe Library*, Oxford, 289. View of, 290.
Raphael, 12, 54, 56, 59, 87, 103, 106.
Rastrelli, 384, 395.
Redentore, Venice, view of church of, 74. Plan of, 79.
Reform Club, London, the, 309, 310.
Renaissance, the typical forms, earliest instance of use of, 42.
Ressonico, Venice, palace of, 99.
Riccardi, Florence, palace of, 83. Façade and section of, 84.
Richini, 126.
Richman, 317.
Rimini, St. Francesco at, 43.
Romano, Giulio, 106, 124.
 —, Collegio, Rome, the, 110.
Rome, Sistine chapel at, 12. San Giovanni Laterano church at, 65-68. St. Paul's, old basilica of, 65. Architectural history of, 100. Deficiency in civil and domestic architecture, 100. Belvidere Court of Vatican at, 101. Loggia Court of Vatican at, 102. Giraud palazzo at, 102. Cancellaria palazzo at, 102. Farnesina villa near, 103. Farnese palace at, 103-105. Pietro Massimi palace at, 103. Angelo Massimi palace at, 103. Ossoli palace at, 103. Palma palace at, 105. Sacchetti palace at, 105. Astylar and arcaded styles prevalent in, 104. Villa Madama at, 106. Museum in Capitol at, 106. Pope Julius villa at, 107, 108. Caprinola palace near, 108, 109. Collegio della Sapienza at, 110. Collegio Romano at, 110. Borghese palace at, 110, 111. Barberini palace at, 111, 112. Tordinoni theatre at, 112.
Roofs, curvilinear, 74.
Roselli, 12.
Rosellini, 32.
Rossi, 400.
Rotta, Casa, Milan, palace of, 126.
Rouen, St. Owen, church at, 182. Cardinal d'Amboise tomb at, 199. New custom-house at, 230.
Rucellai, Florence, palace of, 88.
Ruhmes-kalle, Munich, view of, 347.
Russia, introduction to history of Architecture in, 380-382. Ecclesiastical Architecture of, 382-395. Secular Architecture of, 395-407.

SPIRES.

- Sacchetti*, Rome, palace of, 105.
Sagraffitti, decoration, mole of, 87.
Salamunca, cathedral at, 133.
Saltash, tubular bridge at, 476.
Salute, Santa Maria delle, Venice, plan of church of, 68. View of, 69.
Salisbury, Dorset, church at, 336.
Sanpao, Giuliano da, 87, 101, 103, 105.
Sansorio, 90, 95, 101, 105.
Santiago, cathedral at, 141.
Sapienza, Collegio della, Rome, façade of, 110.
Scala, Milan, theatre, 448. Dimensions of, 457. Plan and façade of, 458.
Scamozzi, 90, 97.
Scarpagnino, 90.
Schiavel, 351, 354, 355, 356, 357, 360, 462.
Schloss, Berlin, the, 339.
Schönbrunn, palace at, 340.
Screen-work, French churches, in, 199, 200.
Sentari, mosque of Selim at, 425.
St. Sebastian, Mantua, church of, 46.
Semitic race, the, 508. Religion of, 509. Government of, 510. Morals of, 510, 511. Literature of, 511. Arts of, 512, 513. Sciences of, 513.
Seas, Episcopal palace at, bay of, 196.
Seo, Zamorra, cathedral of, 139. Cinquecento tower of, 140.
Serlio, 185, 446.
Servandoni, 173, 175.
Sheldonian, Oxford, theatre of, 265, 279.
Sienna, Piccolomini palace at, 87. Spannocchi palace at, 87.
Signorelli, 12.
Siloe, Diego de, 133.
Sistine, Rome, chapel of, 12.
Sterryore, lighthouse of, 477.
Stirling, Bishop, chapel of, 321.
Smirke, Sir Robert, 304, 448.
Smithson, 251.
Smolny, St. Petersburg, near, monastery and church of, 384.
Somme, Sir John, 301, 311.
Solaris, 336.
Soler, Juan, 156.
Somerset House, London, 290. Southern façade, north portion of, 291.
St. Sophia, Constantinople, church of, 423.
Sorbonne, Paris, church of, 170.
Sorel, Agnes, Orleans, house of, 197.
Soubise Hotel, Paris, façade of, 217.
Spain, Moorish remains in, 131. Medieval antiquities of, 131. Three epochs of art in, 132, 133. Ecclesiastical Architecture of, 133-147. Secular Architecture of, 147-159. Exuberance of style in, 147, 151, 152.
Spannocchi, Sienna, palace of, 87.
Spires, northern Gothic churches of, 72.

SANTO.

Santo Spirito, Florence, plan of church of, [41](#). Section of, [42](#).

Staroff, [334](#).

Statue, St. Petersburg, Peter the Great, of, [408](#).

St. Stephen's, Wallbrook, London, church, plan and section of, interior of, [276](#).

Stockholm, palace at, [377](#). Plan of, [378](#). View of, [379](#).

Strawberry Hill, mansion of, [313](#), [314](#).

Street Architecture, Paris, of, [225](#), [226](#).

Strozzi, Florence, palace of, [85](#).

Stuart, [293](#).

Stüler, [354](#).

Sueur, Le, [228](#).

Suffot, [175](#), [448](#), [464](#).

St. Sulpice, Paris, church of, [173](#). Façade of, [174](#). Plan of porch of, [174](#).

Superga, Turin, church of, [71](#).

Surgeons' College, London, [302](#). Façade of, [310](#).

Synagogue, Jews', Pesth, [362](#). View of, [363](#).

T.

Tanjore, pagodas at, [418](#).

Taylor, Robert, [295](#).

Té, del, Mantua, palazzo of, [123](#), [124](#).

Temple Newsam, [252](#).

Tessin, Nicodemus de, [377](#), [379](#).

Theatres, of modern times, importance and prevalence of, [446](#). Italy, Spain, France, and England, earliest of, [447](#). Modern, construction of, [448-456](#). Classification of, [456](#). Lyric, principal dimensions of, &c., [457-462](#). Dramatic, principal dimensions, &c., [462-471](#). Music-halls, [472-473](#).

Theseus, Temple of, Vienna, [361](#).

Thomond, [460](#).

Tiene, Vicenza, palace, façade of, [113](#).

Tokoloff, [400](#).

Toledo, Alcazar at, [153](#), [154](#).

Tophana, mosque at, [425](#).

Tordinoni, Rome, theatre, horseshoe form first introduced in, [448](#).

Travellers' Club, London, [309](#).

Treasury Buildings, London, north front of, [287](#).

Trerisano, Venice, palace of, [92](#).

Trinon, the great Paris hotel of, [219](#).

Trinity College, Cambridge, Neville's Court of, [248](#). Court of library, view of, [280](#).

Trophies and Tombs, France, in, [234-239](#).

Tulerics, the Paris, commencement of, [201](#).

Central pavilion of, De Lorme's design, [202](#). Flore pavilion, [204](#). Arch of, [235](#).

Turanian race, the, [501](#). Religion of, [502](#), [503](#). Government of, [503](#). Morals and literature of, [504](#). Arts of, [504-506](#).

Sciences of, [506](#), [507](#).

Turin, Superga near, [71](#). Architectural buildings, deficiency in, [127](#). Opera-house, the dimensions of, [457](#).

Turkey, history of Renaissance Architecture, commencement in, [423](#). Saracenic style

FRIEND.

in, [423](#). Mosques of, [425-427](#). Palaces of, [427-430](#).

U.

Utah, proposed Mormon temples at, [444](#), [445](#).

V.

Valladolid, cathedral at, plan of, [137](#). Materials, &c., of, [138](#).

Valmarina, Vicenza, palace of, [28](#).

Vandrough, Sir John, [282](#), [283](#), [284](#), [285](#), [286](#).

Vandramini, Venice, palace of, [93](#).

Varoni's, [388](#).

Vaticum, Rome, Belvedere Court of, [101](#). Loggia Court of, [102](#).

Venice, Grimani palace at, [27](#). Santa Maria delle Salute at, [68](#), [69](#). San Simone

Minore at, [69](#). San Zaccaria at, [73](#).

San Francesco della Vigna at, [75](#). San

Giorgio Maggiore at, [75](#), [78](#). Sta. Maria

Zobenico at, [77](#). Secular Architecture of,

[89](#). Gothic style in, [90](#). Internal court

and north-east angle of Ducal palace at,

[90](#), [91](#). Trevisano at, [92](#). Vandramini

palace at, [93](#). Procuratie Vecchie at, [92](#).

Cornaro at, [92](#), [94](#). Camerlinghi at, [94](#).

Grimani at, [94](#). Library of St. Mark at,

[95-97](#). De la Carita convent at, [97](#).

Prison at, [97](#). Zecca palace at, [98](#). Pesaro

palace at, [98](#), [99](#). Pisano palace at, [99](#).

Rezzonica palace at, [99](#). Domestic Archi-

tecture of, [99](#), [100](#). Theatre at, [446](#).

Venice theatre, dimensions of, at, [457](#).

Castello del Lido at, [486](#).

Verona, fragment from the Pellegrini chapel

at, [17](#). Fortifications and gateways at, [486](#).

Versailles, palace, the, as it now exists, plan

of, [209](#). Section of great gallery, &c.,

[210](#). Dimensions, external and internal

arrangement of, [211](#), [212](#). Theatre, the,

plan and section of, [466](#). Dimensions of

theatre at, [462](#).

Vicenza, Valmarina palace at, [28](#). Architec-

ture of, [112](#). Tiene palace at, [113](#). Chie-

ricate palace at, [114](#). Barbarano palace

at, [115](#). Villa del Capro, near, [115](#), [116](#).

Basilica at, [117](#). Theatre at, [446](#). Theatro

Olympico at, [446](#).

Victoria, theatre, Berlin, double auditory and

plan of, [469](#). View of summer auditory,

[470](#).

Vienna, church, San Carlo Borromeo at, [335](#).

The Burg at, [331](#). Votif Kirche at, [361](#).

Temple of Theseus at, [361](#). Imperial

arsenal at, [362](#). Armoury at, [362](#). Opera-

house at, dimensions of, &c., [457](#), [462](#).

Vigna, San Francesco della, Venice, church

of, [75](#).

Vignola, Giacomo Barozzi da, [106](#), [107](#), [108](#),

[242](#).

Votif Kirche, Vienna, plan of, [361](#).

Vriendt, Cornelius de, [369](#).

WALHALLA.

W.

- Walhalla*, Munich, [345](#). Plan of, [346](#).
Wanstead House, front elevation of, [287](#).
Warwick, tower of church at, [278](#).
Washington, the Capitol at, [437](#). Plan of the original Capitol, [438](#); view of ditto, with proposed wings, [439](#). Smithsonian Institute at, [439](#). Tower of ditto, [440](#). Treasury buildings at, [440](#), [441](#).
Waterloo Bridge, London, [476](#).
Werder Kirche, Berlin, [351](#).
Westwood House, [252](#).
Whitehall, plan of Inigo Jones's design for palace at, [257](#). Diagrams of ditto, [258](#). Banqueting-house, [260](#).
Wilkins, [303](#), [316](#).
Wilton House, façade of, [263](#).
Winchester, palace at, [279](#).
Windows, Scotland, ornaments of, 254.
Windsor Castle, [323](#).

ZWIRNER.

- Winter Palace* (St. Petersburg), dimensions of, [395](#). Portion of façade of, [396](#).
Wollaton House, view of, [251](#).
Wren, Sir Christopher, [265-281](#).
Wyatt, James, [313](#), [448](#).
Wyatville, Sir Jeffrey, [323](#).

Z.

- San Zaccaria*, Venice, church of, [73](#).
Zamienie, St. Petersburg, church of, [388](#).
Zaragoza, cathedral del Pilar at, [138](#), [139](#). See cathedral at, [139](#), [140](#). Court in palace of the Infanta at, [151](#).
Zarco Zelo, St. Petersburg, near, palace of, [396](#).
Zecca, Venice, palace of, [98](#).
Ziehlend, [344](#).
Zobenico, Sta. Maria, Venice, church of, [97](#).
Zucharoff, [399](#).
Zwirner, Dresden, view of palace of, [338](#).

THE END.

ALBEMARLE STREET, LONDON.
July, 1862.

MR. MURRAY'S

GENERAL LIST OF WORKS.

- ABBOTT'S (REV. J.)** Philip Musgrave; or, Memoirs of a Church of England Missionary in the North American Colonies. Post 8vo. 2s.
- ABERCROMBIE'S (JOHN)** Enquiries concerning the Intellectual Powers and the Investigation of Truth. *Sixteenth Edition.* Fcap. 8vo. 6s. 6d.
- *Philosophy of the Moral Feelings.* *Twelfth Edition.* Fcap. 8vo. 4s.
- *Pathological and Practical Researches on the Diseases of the Stomach, &c.* *Third Edition.* Fcap. 8vo. 6s.
- ACLAND'S (REV. CHARLES)** Popular Account of the Manners and Customs of India. Post 8vo. 2s.
- ADOLPHUS'S (J. L.)** Letters from Spain, in 1856 and 1857. Post 8vo. 10s. 6d.
- ÆSCHYLUS.** (The Agamemnon and Chæphoræ.) Edited, with Notes. By Rev. W. PHILE, D.D. *Second Edition.* 2 Vols. 8vo. 9s. each.
- ÆSOP'S FABLES.** A New Translation. With Historical Preface. By Rev. THOMAS JAMES. With 100 Woodcuts, by TENNIEL and WOLF. *38th Thousand.* Post 8vo. 2s. 6d.
- AGRICULTURAL (THE) JOURNAL.** Of the Royal Agricultural Society of England. 8vo. 10s. *Published half-yearly.*
- AIDS TO FAITH: a Series of Theological Essays.** By various Writers. Edited by WILLIAM THOMSON, D.D., Bishop of Gloucester and Bristol. 8vo. 9s.

CONTENTS.

- | | |
|--|---|
| <p>Rev. H. L. MAFSEL—<i>On Miracles.</i>
BISHOP OF CORK — <i>Christian Evidences.</i></p> <p>Rev. DR. McCAUL—<i>On Prophecy.</i></p> <p>Rev. F. C. CONE — <i>Ideology and Subscription.</i></p> <p>Rev. DR. McCAUL—<i>Mosaic Record of Creation.</i></p> | <p>Rev. GEORGE RAWLINSON—<i>The Pentateuch.</i>
BISHOP OF GLOUCESTER AND BRISTOL — <i>Doctrine of the Atonement.</i></p> <p>Rev. HAROLD BROWN—<i>On Inspiration.</i></p> <p>DEAN OF EXETER—<i>Scripture and its Interpretation.</i></p> |
|--|---|
- AMBER-WITCH (THE).** The most interesting Trial for Witchcraft ever known. Translated from the German by LADY DUFF GORDON. Post 8vo. 2s.
- ARTHUR'S (LITTLE) History of England.** By LADY CALLOOT. *100th Thousand.* With 20 Woodcuts. Fcap. 8vo. 2s. 6d.
- AUNT IDA'S Walks and Talks; a Story Book for Children.** By a LADY. Woodcuts. 16mo. 5s.
- AUSTIN'S (JOHN) PROVINCE OF JURISPRUDENCE DETERMINED; or, Philosophy of Positive Law.** *Second Edition.* 8vo. 15s.
- *Lectures on Jurisprudence.* Being a Continuation of the "Province of Jurisprudence Determined." 8vo. (*Nearly Ready.*)
- (SARAH) *Fragments from German Prose Writers.* With Biographical Notes. Post 8vo. 10s.

ADMIRALTY PUBLICATIONS; Issued by direction of the Lords Commissioners of the Admiralty:—

A MANUAL OF SCIENTIFIC ENQUIRY, for the Use of Travellers in General. By Various Hands. Edited by Sir JOHN F. HERSCHEL, Bart. *Third Edition*, revised by Rev. ROBERT MAIN. Woodcuts. Post 8vo. 9s.

AIRY'S ASTRONOMICAL OBSERVATIONS MADE AT GREENWICH. 1836 to 1847. Royal 4to. 60s. each.

— ASTRONOMICAL RESULTS. 1848 to 1868. 4to. 8s. each.

— APPENDICES TO THE ASTRONOMICAL OBSERVATIONS.

1836.—I. Bessel's Refraction Tables.

II. Tables for converting Errors of R.A. and N.P.D. } 8s.
Into Errors of Longitude and Eccentric P.D.

1837.—I. Logarithms of Sines and Cosines to every Ten } 8s.
Seconds of Time.

II. Table for converting Sidereal into Mean Solar Time.

1842.—Catalogue of 1439 Stars. 8s.

1845.—Longitude of Valencia. 8s.

1847.—Twelve Years' Catalogue of Stars. 14s.

1851.—Maskelyne's Ledger of Stars. 6s.

1852.—I. Description of the Transit Circle. 5s.

II. Regulations of the Royal Observatory. 2s.

1853.—Bessel's Refraction Tables. 3s.

1854.—I. Description of the Zenith Tube. 3s.

II. Six Years' Catalogue of Stars. 10s.

1856.—Description of the Galvanic Apparatus at Greenwich Observatory. 8s.

— MAGNETICAL AND METEOROLOGICAL OBSERVATIONS. 1840 to 1847. Royal 4to. 50s. each.

— ASTRONOMICAL, MAGNETICAL AND METEOROLOGICAL OBSERVATIONS, 1848 to 1859. Royal 4to. 50s. each.

— ASTRONOMICAL RESULTS. 1859. 4to.

— MAGNETICAL AND METEOROLOGICAL RESULTS. 1848 to 1859. 4to. 8s. each.

— REDUCTION OF THE OBSERVATIONS OF PLANETS, 1750 to 1830. Royal 4to. 50s.

— LUNAR OBSERVATIONS. 1750 to 1830. 2 Vols. Royal 4to. 50s. each.

1831 to 1831. 4to. 20s.

BERNOULLI'S SEXCENTENARY TABLE. London, 1779. 4to.

BESSEL'S AUXILIARY TABLES FOR HIS METHOD OF CLEARING LUNAR DISTANCES. 8vo.

— FUNDAMENTA ASTRONOMIÆ: *Regiomontii*, 1818. Folio. 60s.

BIRD'S METHOD OF CONSTRUCTING MURAL QUADRANTS. London, 1768. 4to. 2s. 6d.

— METHOD OF DIVIDING ASTRONOMICAL INSTRUMENTS. London, 1767. 4to. 2s. 6d.

COOK, KING, AND BAYLY'S ASTRONOMICAL OBSERVATIONS. London 1782. 4to. 21s.

LIFFE'S ACCOUNT OF IMPROVEMENTS IN CHRONOMETERS. 4to. 2s.

ENCKE'S BERLINER JAHRBUCH, for 1830. Berlin, 1828. 8vo. 9s.

GROENBRIDGE'S CATALOGUE OF CIRCUMPOLAR STARS. 4to. 10s.

HANSEN'S TABLES DE LA LUNE. 4to. 20s.

HARRISON'S PRINCIPLES OF HIS TIME-KEEPER, PLATES. 1797. 4to. 5s.

ADMIRALTY PUBLICATIONS—continued.

- HUTTON'S TABLES OF THE PRODUCTS AND POWERS OF NUMBERS. 1781. Folio. 7s. 6d.
- LAX'S TABLES FOR FINDING THE LATITUDE AND LONGITUDE. 1821. 8vo. 10s.
- LUNAR OBSERVATIONS at GREENWICH. 1788 to 1819. Compared with the Tables, 1821. 4to. 7s. 6d.
- MASKELYNE'S ACCOUNT OF THE GOING OF HARRISON'S WATCH. 1767. 4to. 2s. 6d.
- MAYER'S DISTANCES of the MOON'S CENTRE from the PLANETS. 1822, 3s.; 1823, 4s. 6d. 1824 to 1835, 8vo. 4s. each.
- THEORIA LUNÆ JUXTA SYSTEMA NEWTONIANUM. 4to. 2s. 6d.
- TABULÆ MOTUUM SOLIS ET LUNÆ. 1770. 4to. 5s.
- ASTRONOMICAL OBSERVATIONS MADE AT GOTTINGEN, from 1756 to 1761. 1826. Folio. 7s. 6d.
- NAUTICAL ALMANACS, from 1767 to 1854. 8vo. 2s. 6d. each.
- SELECTIONS FROM THE ADDITIONS up to 1812. 8vo. 5s. 1834-54. 8vo. 5s.
- SUPPLEMENTS, 1828 to 1833, 1837 and 1838. 8vo. 2s. each.
- TABLE requisite to be used with the N.A. 1781. 8vo. 5s.
- POND'S ASTRONOMICAL OBSERVATIONS. 1811 to 1835. 4to. 21s. each.
- RAMSDEN'S ENGINE for DIVIDING MATHEMATICAL INSTRUMENTS. 4to. 5s.
- ENGINE for DIVIDING STRAIGHT LINES. 4to. 5s.
- SABINE'S PENDULUM EXPERIMENTS to DETERMINE THE FIGURE OF THE EARTH. 1825. 4to. 40s.
- SHEPHERD'S TABLES for CORRECTING LUNAR DISTANCES. 1772. Royal 4to. 21s.
- TABLES, GENERAL, of the MOON'S DISTANCE from the SUN, and 10 STARS. 1787. Folio. 5s. 6d.
- TAYLOR'S SEXAGESIMAL TABLE. 1780. 4to. 15s.
- TABLES OF LOGARITHMS. 4to. 3l.
- TIARK'S ASTRONOMICAL OBSERVATIONS for the LONGITUDE of MADEIRA. 1822. 4to. 5s.
- CHRONOMETRICAL OBSERVATIONS for DIFFERENCES of LONGITUDE between DOVER, PORTSMOUTH, and FALMOUTH. 1823. 4to. 5s.
- VENUS and JUPITER: OBSERVATIONS of, compared with the TABLES. London, 1822. 4to. 2s.
- WALES' AND BAYLY'S ASTRONOMICAL OBSERVATIONS. 1777. 4to. 21s.
- WALES' REDUCTION OF ASTRONOMICAL OBSERVATIONS MADE IN THE SOUTHERN HEMISPHERE. 1764-1771. 1788. 4to. 10s. 6d.
- BABBAGE'S (CHARLES) Economy of Machinery and Manufactures. Fourth Edition. Fcap. 8vo. 6s.
- Ninth Bridgewater Treatise. 8vo. 9s. 6d.
- Reflections on the Decline of Science in England, and on some of its Causes. 4to. 7s. 6d.

- BAIKIE'S (W. B.)** Narrative of an Exploring Voyage up the Rivers Quorra and Tshadda in 1864. Map. 8vo. 16s.
- BANKES' (GEORGE)** STORY OF CORVA CASTLE, with documents relating to the Time of the Civil War, &c. Woodcuts. Post 8vo. 10s. 6d.
- BASSOMPIERRE'S** Memoirs of his Embassy to the Court of England in 1626. Translated with Notes. 8vo. 9s. 6d.
- BASTIAT'S (FREDERIC)** Harmonies of Political Economy. Translated, with a Notice of his Life and Writings, by P. J. STIRLING. 8vo. 7s. 6d.
- BARROW'S (SIR JOHN)** Autobiographical Memoir, including Reflections, Observations, and Reminiscences at Home and Abroad. From Early Life to Advanced Age. Portrait. 8vo. 16s.
- Voyages of Discovery and Research within the Arctic Regions, from 1818 to the present time. Abridged and arranged from the Official Narratives. 8vo. 15s.
- (SIR GEORGE) Ceylon; Past and Present. Map. Post 8vo. 6s. 6d.
- (JOHN) Naval Worthies of Queen Elizabeth's Reign, their Gallant Deeds, Daring Adventures, and Services in the infant state of the British Navy. 8vo. 14s.
- Life and Voyages of Sir Francis Drake. With numerous Original Letters. Post 8vo. 2s.
- BEEES AND FLOWERS.** Two Essays. By Rev. Thomas James. Reprinted from the "Quarterly Review." Fcap. 8vo. 1s. each.
- BELL'S (SIR CHARLES)** Mechanism and Vital Endowments of the Hand as evincing Design. Sixth Edition. Woodcuts. Post 8vo. 6s.
- BENEDICT'S (JULES)** Sketch of the Life and Works of Felix Mendelssohn-Bartholdy. Second Edition. 8vo. 2s. 6d.
- BERTHA'S** Journal during a Visit to her Uncle in England. Containing a Variety of interesting and instructive Information. Seventh Edition. Woodcuts. 12mo.
- BIRCH'S (SAMUEL)** History of Ancient Pottery and Porcelain: Egyptian, Assyrian, Greek, Roman, and Etruscan. With 200 Illustrations. 2 Vols. Medium 8vo. 42s.
- BLUNTS (REV. J. J.)** Principles for the proper understanding of the Mosala Writings, stated and applied, together with an Incidental Argument for the truth of the Resurrection of our Lord. Being the HULSWAN LECTURES for 1832. Post 8vo. 6s. 6d.
- Undesigned Coincidences in the Writings of the Old and New Testament, an Argument of their Veracity: with an Appendix containing Undesigned Coincidences between the Gospels, Acts, and Josephus. Sixth Edition. Post 8vo. 7s. 6d.
- History of the Church in the First Three Centuries. Third Edition. Post 8vo. 7s. 6d.
- Parish Priest; His Duties, Acquirements and Obligations. Third Edition. Post 8vo. 7s. 6d.
- Lectures on the Right Use of the Early Fathers. Second Edition. 8vo. 16s.
- Plain Sermons Preached to a Country Congregation. Second Edition. 3 Vols. Post 8vo. 7s. 6d. each.
- Literary and Clerical Essays. 8vo. 12s.

BLACKSTONE'S COMMENTARIES on the Laws of England. Adapted to the present state of the law. By R. MALCOLM KERR, LL.D. *Third Edition*, corrected to 1861. 4 Vols. 8vo. 63s.

— **For STUDENTS.** Being those Portions which relate to the BRITISH CONSTITUTION and the RIGHTS OF PERSONS. Post 8vo. 2s.

BOOK OF COMMON PRAYER. Illustrated with Borders, Initials, Letters, and Woodcuts. 8vo. 21s.

BOSWELL'S (JAMES) Life of Dr. Johnson. Including the Tour to the Hebrides. Edited by Mr. CHAMBERLAIN. Portraits. Royal 8vo. 10s.

BORROW'S (GEORGE) Lavengro; The Scholar—The Gipsy—and the Priest. Portrait. 3 Vols. Post 8vo. 30s.

— **Romany Rye; a Sequel to Lavengro.** *Second Edition.* 2 Vols. Post 8vo. 21s.

— **Bible in Spain; or the Journeys, Adventures, and Imprisonments of an Englishman in an Attempt to circulate the Scriptures in the Peninsula.** 3 Vols. Post 8vo. 27s.; or *Popular Edition*, 16mo, 3s. 6d.

— **Zincali, or the Gipsies of Spain; their Manners, Customs, Religion, and Language.** 2 Vols. Post 8vo. 18s.; or *Popular Edition*, 16mo, 3s. 6d.

BRAY'S (MRS.) Life of Thomas Stothard, R.A. With Personal Reminiscences. Illustrated with Portrait and 60 Woodcuts of his chief works. 4to.

BREWSTER'S (SIR DAVID) Martyrs of Science, or the Lives of Galileo, Tycho Brahe, and Kepler. *Fourth Edition.* Fcap. 8vo. 4s. 6d.

— **More Worlds than One.** The Creed of the Philosopher and the Hope of the Christian. *Eighth Edition.* Post 8vo. 6s.

— **Stereoscope: its History, Theory, Construction, and Application to the Arts and to Education.** Woodcuts. 12mo. 5s. 6d.

— **Kaleidoscope: its History, Theory, and Construction, with its application to the Fine and Useful Arts.** *Second Edition.* Woodcuts. Post 8vo. 5s. 6d.

BRITISH ASSOCIATION REPORTS. 8vo. York and Oxford, 1831-32, 13s. 6d. Cambridge, 1833, 12s. Edinburgh, 1834, 15s. Dublin, 1835, 13s. 6d. Bristol, 1836, 12s. Liverpool, 1837, 16s. 6d. Newcastle, 1838, 15s. Birmingham, 1839, 15s. 6d. Glasgow, 1840, 15s. Plymouth, 1841, 13s. 6d. Manchester, 1842, 10s. 6d. Cork, 1843, 12s. York, 1844, 20s. Cambridge, 1845, 12s. Southampton, 1846, 15s. Oxford, 1847, 18s. Swansea, 1848, 9s. Birmingham, 1849, 10s. Edinburgh, 1850, 15s. Ipswich, 1851, 16s. 6d. Belfast, 1852, 15s. Hull, 1853, 10s. 6d. Liverpool, 1854, 18s. Glasgow, 1855, 15s.; Cheltenham, 1856, 18s.; Dublin, 1857, 15s.; Leeds, 1858, 20s. Aberdeen, 1859, 15s. Oxford, 1860, Manchester, 1861, 15s.

BRITISH CLASSICS. A New Series of Standard English Authors, printed from the most correct text, and edited with elucidatory notes. Published occasionally in demy 8vo. Volumes, varying in price.

Already Published.

GOLDSMITH'S WORKS. Edited by PETER CUKINGHAM, F.S.A. Vignettes. 4 Vols. 50s.

GIBBON'S DECLINE AND FALL OF THE ROMAN EMPIRE. Edited by WILLIAM SMITH, LL.D. Portrait and Maps. 8 Vols. 60s.

JOHNSON'S LIVES OF THE ENGLISH POETS. Edited by PETER CUKINGHAM, F.S.A. 3 Vols. 22s. 6d.

BYRON'S POETICAL WORKS. Edited, with Notes. 6 vols. 45s.

In Preparation.

WORKS OF POPE. With Life, Introductions, and Notes, by REV. WHITEWELL ELWIN. Portrait.

HUME'S HISTORY OF ENGLAND. Edited, with Notes.

LIFE AND WORKS OF SWIFT. Edited by JOHN FOSBROOK.

BROUGHAM'S (LORD) Address at the Social Science Association, Dublin. August, 1861. Revised, with Notes. 8vo. 1s.

BROUGHTON'S (LORD) Journey through Albania and other Provinces of Turkey in Europe and Asia, to Constantinople, 1808-10. *Third Edition.* Maps and Woodcuts. 2 Vols. 8vo. 30s.

— **Visita to Italy.** *Third Edition.* 2 vols. Post

8vo. 18s.

BUBBLES FROM THE BRUNNEN OF NASSAU. By an Old Man. *Sixth Edition.* 16mo. 5s.

BUNBURY'S (C. J. F.) Journal of a Residence at the Cape of Good Hope; with Excursions into the Interior, and Notes on the Natural History and Native Tribes of the Country. Woodcuts. Post 8vo. 9s.

BUNYAN (JOHN) and Oliver Cromwell. Select Biographies. By ROBERT SOUTHAY. Post 8vo. 2s.

BUONAPARTE'S (NAPOLEON) Confidential Correspondence with his Brother Joseph, sometime King of Spain. *Second Edition.* 2 vols. 8vo. 26s.

BURGHERSH'S (LORD) Memoir of the Operations of the Allied Armies under Prince Schwarzenberg and Marshal Blücher during the latter end of 1813-14. 8vo. 21s.

— **Early Campaigns of the Duke of Wellington in Portugal and Spain.** 8vo. 8s. 6d.

BURGON'S (REV. J. W.) Memoir of Patrick Fraser Tytler. *Second Edition.* Post 8vo. 9s.

— **Letters from Rome, written to Friends at Home.** Illustrations. Post 8vo. 12s.

BURNS (LIEUT.-COL.) French and English Dictionary of Naval and Military Technical Terms. *Third Edition.* Crown 8vo. 15s.

BURNS' (ROBERT) Life. By JOHN GIBSON LOCKHART. *Fifth Edition.* Fcap. 8vo. 3s.

BURR'S (G. D.) Instructions in Practical Surveying, Topographical Plan Drawing, and on sketching ground without instruments. *Third Edition.* Woodcuts. Post 8vo. 7s. 6d.

BUTTMAN'S LEXICOLOGUS; a Critical Examination of the Meaning of numerous Greek Words, chiefly in Homer and Hesiod. Translated by REV. J. R. FISHLAKE. *Fifth Edition.* 8vo. 12s.

BUXTON'S (SIR FOWELL) Memoirs. With Selections from his Correspondence. By his Son. Portrait. *Fifth Edition.* 8vo. 16s.
Abridged Edition, Portrait. Fcap. 8vo. 2s. 6d.

BYRON'S (LORD) Life, Letters, and Journals. By THOMAS MOORE. Plates. 6 Vols. Fcap. 8vo. 18s.

——— *Life, Letters, and Journals.* By THOMAS MOORE. Portraits. Royal 8vo. 9s.

——— Poetical Works. Portrait. 6 Vols. 8vo. 45s.

——— Poetical Works. Plates. 10 Vols. Fcap. 8vo. 30s.

——— Poetical Works. 8 Vols. 24mo. 20s.

——— Poetical Works. Plates. Royal 8vo. 9s.

——— Poetical Works. Portrait. Crown 8vo. 6s.

——— Child Harold. With 80 Engravings. Square 8vo. 21s.

——— Child Harold. With 30 Vignettes. 12mo. 6s.

——— Child Harold. 16mo. 2s. 6d.

——— Child Harold. Vignettes. 16mo. 1s.

——— Child Harold. Portrait. 16mo. 6d.

——— Tales and Poems. 24mo. 2s. 6d.

——— Miscellaneous. 2 Vols. 24mo. 5s.

——— Dramas and Plays. 2 Vols. 24mo. 5s.

——— Don Juan and Beppo. 2 Vols. 24mo. 5s.

——— Beauties. Selected from his Poetry and Prose. Portrait. Fcap. 8vo. 2s. 6d.

CARNARVON'S (LORD) Portugal, Galicia, and the Basque Provinces. From Notes made during a Journey to those Countries. *Third Edition.* Post 8vo. 3s. 6d.

——— Address on the Archaeology of Berkshire. *Second Edition.* Fcap. 8vo. 1s.

——— Recollections of the Druses of Lebanon. With Notes on their Religion. *Third Edition.* Post 8vo. 5s. 6d.

CAMPBELL'S (LORD) Lives of the Lord Chancellors and Keepers of the Great Seal of England. From the Earliest Times to the Death of Lord Eldon in 1838. *Fourth Edition.* 10 Vols. Crown 8vo. 6s. each.

——— Lives of the Chief Justices of England. From the Norman Conquest to the Death of Lord Tenterden. *Second Edition.* 3 Vols. 8vo. 42s.

——— Shakspeare's Legal Acquirements Considered. 8vo. 5s. 6d.

——— Life of Lord Chancellor Bacon. Fcap. 8vo. 2s. 6d.

——— (GEORGE) Modern India. A Sketch of the System of Civil Government. With some Account of the Natives and Native Institutions. *Second Edition.* 8vo. 16s.

——— India as it may be. An Outline of a proposed Government and Policy. 8vo. 12s.

——— (THOMAS) Short Lives of the British Poets. With an Essay on English Poetry. Post 8vo. 3s. 6d.

- CALVIN'S (JOHN) Life.** With Extracts from his Correspondence. By THOMAS H. DYER. Portrait. 8vo. 15s.
- CALLCOTT'S (LADY) Little Arthur's History of England.** 100th Thousand. With 20 Woodcuts. Fcap. 8vo. 2s. 6d.
- CARMICHAEL'S (A. N.) Greek Verbs. Their Formations, Irregularities, and Defects.** Second Edition. Post 8vo. 8s. 6d.
- CASTLEREAGH (THE) DESPATCHES,** from the commencement of the official career of the late Viscount Castlereagh to the close of his life. Edited by the MARQUIS OF LONDONDERRY. 12 Vols. 8vo. 14s. each.
- CATHCART'S (SIR GEORGE) Commentaries on the War in Russia and Germany, 1812-13.** Plans. 8vo. 14s.
- **Military Operations in Kaffraria,** which led to the Termination of the Kaffir War. Second Edition. 8vo. 12s.
- CAVALCASELLE (G. B.) Notices of the Early Flemish Painters; Their Lives and Works.** Woodcuts. Post 8vo. 12s.
- CHAMBERS' (G. F.) Handbook of Descriptive and Practical Astronomy.** Illustrations. Post 8vo. 12s.
- CHANTREY (SIR FRANCIS). Winged Words on Chantrey's Woodcocks.** Edited by JAS. F. MUIRHEAD. Etchings. Square 8vo. 10s. 6d.
- CHARMED ROE (THE); or, The Story of the Little Brother and Sister.** By OTTO SPECKTER. Plates. 16mo. 5s.
- CLAUSEWITZ'S (CARL VON) Campaign of 1812, in Russia.** Translated from the German by LORD ELLSMERE. Map. 8vo. 10s. 6d.
- CLIVE'S (LORD) Life.** By REV. G. R. GLEIG, M.A. Post 8vo. 3s. 6d.
- COBBOLD'S (REV. R. H.) Pictures of the Chinese drawn by themselves.** With 24 Plates. Crown 8vo. 9s.
- COLCHESTER (LORD). The Diary and Correspondence of Charles Abbott, Lord Colchester, Speaker of the House of Commons, 1803-1817.** Edited by HIS SON. Portrait. 3 Vols. 8vo. 42s.
- COLERIDGE'S (SAMUEL TAYLOR) Table-Talk.** Fourth Edition. Portrait. Fcap. 8vo. 6s.
- (HENRY NELSON) **Introductions to the Greek Classic Poets.** Third Edition. Fcap. 8vo. 5s. 6d.
- (SIR JOHN) **on Public School Education,** with especial reference to Eton. Third Edition. Fcap. 8vo. 2s.
- COLONIAL LIBRARY.** [See Home and Colonial Library.]
- COOKERY (DOMESTIC). Founded on Principles of Economy and Practical Knowledge, and adapted for Private Families.** New Edition. Woodcuts. Fcap. 8vo. 5s.
- CORNWALLIS (THE) Papers and Correspondence during the American War,—Administrations in India,—Union with Ireland, and Peace of Amiens.** Edited by CHARLES MOSE. Second Edition. 3 Vols. 8vo. 63s.
- CRABBE'S (REV. GEORGE) Life, Letters, and Journals.** By his SON. Portrait. Fcap. 8vo. 8s.
- **Poetical Works.** With his Life. Plates. 8 Vols. Fcap. 8vo. 24s.
- **Life and Poetical Works.** Plates. Royal 8vo. 7s.

CURZON'S (HON. ROBERT) Visits to the Monasteries of the Levant. *Fourth Edition.* Woodcuts. Post 8vo. 15s.

— **ARMENIA AND ERZEROU.** A Year on the Frontiers of Russia, Turkey, and Persia. *Third Edition.* Woodcuts. Post 8vo. 7s. 6d.

CUNNINGHAM'S (ALLAN) Life of Sir David Wilkie. With his Journals and Critical Remarks on Works of Art. Portrait. 3 Vols. 8vo. 42s.

— Poems and Songs. Now first collected and arranged, with Biographical Notice. 24mo. 2s. 6d.

— (CAPT. J. D.) History of the Sikhs. From the Origin of the Nation to the Battle of the Sutlej. *Second Edition.* Maps. 8vo. 15s.

CROKER'S (J. W.) Progressive Geography for Children. *Fifth Edition.* 16mo. 1s. 6d.

— Stories for Children, Selected from the History of England. *Fifteenth Edition.* Woodcuts. 16mo. 2s. 6d.

— Boswell's Life of Johnson. Including the Tour to the Hebrides. Portraits. Royal 8vo. 10s.

— **LORD HERVEY'S** Memoirs of the Reign of George the Second, from his Accession to the death of Queen Caroline. Edited with Notes. *Second Edition.* Portrait. 2 Vols. 8vo. 21s.

— Essays on the Early Period of the French Revolution. Reprinted from the Quarterly Review. 8vo. 15s.

— Historical Essay on the Guillotine. Fcap. 8vo. 1s.

CROMWELL (OLIVER) and John Bunyan. By ROBERT SOUTHBY. Post 8vo. 2s.

CROWES (J. A.) Notices of the Early Flemish Painters; their Lives and Works. Woodcuts. Post 8vo. 12s.

CURETON (REV. W.) Remains of a very Ancient Recension of the Four Gospels in Syriac, hitherto unknown in Europe. Discovered, Edited, and Translated. 4to. 24s.

CURTIUS' (PROFESSOR) Greek Grammar. Translated from the German. Edited by DR. WM. SMITH. Post 8vo. (*In the Press.*)

DARWIN'S (CHARLES) Journal of Researches into the Natural History and Geology of the Countries visited during a Voyage round the World. *Tenth Thousand.* Post 8vo. 9s.

— Origin of Species by Means of Natural Selection; or, the Preservation of Favoured Races in the Struggle for Life. *Seventh Thousand.* Post 8vo. 14s.

— Various Contrivances by which Orchids are Fertilised through Insect Agency, and as to the good of Interfering. Woodcuts. Post 8vo. 9s.

DAVY'S (SIR HUMPHRY) Consolations in Travel; or, Last Days of a Philosopher. *Fifth Edition.* Woodcuts. Fcap. 8vo. 6s.

— Salmonia; or, Days of Fly Fishing. With some Account of the Habits of Fishes belonging to the genus Salmo. *Fourth Edition.* Woodcuts. Fcap. 8vo. 6s.

DELEPIERRE'S (OCTAVE) History of Flemish Literature and its celebrated Authors. From the Twelfth Century to the present Day. 8vo. 9s.

DENNIS' (GEORGE) Cities and Cemeteries of Etruria. Plates. 2 Vols. 8vo. 42s.

- DIXON'S (HEPWORTH) *Story of the Life of Lord Bacon*. Portrait. Fcap. 8vo. 7s. 6d.
- DOG-BREAKING; the Most Expeditions, Certain, and Easy Method, whether great excellence or only mediocrity be required. By LIEUT.-COL. HUTCHINSON. *Third Edition*. Woodcuts. Post 8vo. 9s.
- DOMESTIC MODERN COOKERY. Founded on Principles of Economy and Practical Knowledge, and adapted for Private Families. *New Edition*. Woodcuts. Fcap. 8vo. 6s.
- DOUGLASS (GENERAL SIR HOWARD) *Treatise on the Theory and Practice of Gunnery*. *Fifth Edition*. Plates. 8vo. 21s.
- *Treatise on Military Bridges, and the Passages of Rivers in Military Operations*. *Third Edition*. Plates. 8vo. 21s.
- *Naval Warfare with Steam*. *Second Edition*. 8vo. 6s. 6d.
- *Modern Systems of Fortification, with special references to the Naval, Littoral, and Internal Defence of England*. Plans. 8vo. 12s.
- DRAKES (SIR FRANCIS) *Life, Voyages, and Exploits, by Sea and Land*. By JOHN BARROW. *Third Edition*. Post 8vo. 2s.
- DRINKWATERS (JOHN) *History of the Siege of Gibraltar, 1779-1783*. With a Description and Account of that Garrison from the Earliest Periods. Post 8vo. 2s.
- DU CHAILLUS (PAUL B.) *EQUATORIAL AFRICA*, with Accounts of the Manners and Customs of the People, and of the Chase of the Gorilla, the Nest-building Ape, Chimpanzee, Crocodile, &c. *Tenth Thousand*. Illustrations. 8vo. 21s.
- DUDLEY'S (EARL OF) *Letters to the late Bishop of Llandaff*. *Second Edition*. Portrait. 8vo. 10s. 6d.
- DUFFERIN'S (LORD) *Letters from High Latitudes, being some Account of a Yacht Voyage to Iceland, &c., in 1856*. *Fourth Edition*. Woodcuts. Post 8vo. 9s.
- DURHAM'S (ADMIRAL SIR PHILIP) *Naval Life and Services*. By CAPT. ALEXANDER MURRAY. 8vo. 5s. 6d.
- DYER'S (THOMAS H.) *Life and Letters of John Calvin*. Compiled from authentic Sources. Portrait. 8vo. 15s.
- *History of Modern Europe, from the taking of Constantinople by the Turks to the close of the War in the Crimea*. Vols. 1 & 2. 8vo. 80s.
- EASTLAKE'S (SIR CHARLES) *Italian Schools of Painting*. From the German of KUGLER. Edited, with Notes. *Third Edition*. Illustrated from the Old Masters. 2 Vols. Post 8vo. 30s.
- EASTWICK'S (E. B.) *Handbook for Bombay and Madras, with Directions for Travellers, Officers, &c.* Map. 2 Vols. Post 8vo. 24s.
- EDWARDS' (W. H.) *Voyage up the River Amazon, including a Visit to Para*. Post 8vo. 2s.
- EGERTON'S (HON. CAPT. FRANCIS) *Journal of a Winter's Tour in India; with a Visit to Nepal*. Woodcuts. 2 Vols. Post 8vo. 18s.
- ELDON'S (LORD) *Public and Private Life, with Selections from his Correspondence and Diaries*. By HONORÉ TISSOT. *Third Edition*. Portrait. 2 Vols. Post 8vo. 21s.
- ELIOTS (HON. W. G. C.) *Khans of the Crimea*. Being a Narrative of an Embassy from Frederick the Great to the Court of Krim Gerai. Translated from the German. Post 8vo. 6s.

- ELLIS (REV. W.) *Visits to Madagascar, including a Journey to the Capital, with notices of Natural History, and Present Civilisation of the People.* Fifth Thousand. Map and Woodcuts. 8vo. 16s.
- (MRS.) *Education of Character, with Hints on Moral Training.* Post 8vo. 7s. 6d.
- ELLESMERE'S (LORD) *Two Sieges of Vienna by the Turks.* Translated from the German. Post 8vo. 2s.
- *Second Campaign of Radetzky in Piedmont. The Defence of Temeswar and the Camp of the Ban.* From the German. Post 8vo. 6s. 6d.
- *Campaign of 1812⁶ in Russia, from the German of General Carl Von Clausewitz.* Map. 8vo. 10s. 6d.
- *Pilgrimage, and other Poems.* Crown 4to. 24s.
- *Essays on History, Biography, Geography, and Engineering.* 8vo. 12s.
- ELPHINSTONE'S (HON. MOUNTSTUART) *History of India—the Hindoo and Mahomedan Periods.* Fourth Edition. With an Index. Map. 8vo. 18s.
- ENGLAND (HISTORY OF) *from the Peace of Utrecht to the Peace of Versailles, 1713-83.* By LORD MAHON. Library Edition, 7 Vols. 8vo. 93s.; or Popular Edition, 7 Vols. Post 8vo. 35s.
- *From the First Invasion by the Romans, down to the 14th year of Queen Victoria's Reign.* By MRS. MARKHAM. 118th Edition. Woodcuts. 12mo. 6s.
- *Social, Political, and Industrial, in the 19th Century.* By W. JOHNSTON. 2 Vols. Post 8vo. 18s.
- ENGLISHWOMAN IN AMERICA. Post 8vo. 10s. 6d.
- RUSSIA. Woodcuts. Post 8vo. 10s. 6d.
- EOTHEN; or, *Traces of Travel brought Home from the East.* A New Edition. Post 8vo. 7s. 6d.
- ERSKINE'S (ADMIRAL) *Journal of a Cruise among the Islands of the Western Pacific, including the Fijees, and others inhabited by the Polynesian Negro Races.* Plates. 8vo. 16s.
- ESKIMAUX and English Vocabulary, for Travellers in the Arctic Regions. 16mo. 3s. 6d.
- ESSAYS FROM "THE TIMES." Being a Selection from the LITERARY PAPERS which have appeared in that Journal. Seventh Thousand. 2 vols. Fcap. 8vo. 8s.
- EXETER'S (BISHOP OF) *Letters to the late Charles Butler, on the Theological parts of his Book of the Roman Catholic Church; with Remarks on certain Works of Dr. Milner and Dr. Lingard, and on some parts of the Evidence of Dr. Doyle.* Second Edition. 8vo. 16s.
- FAIRY RING; A Collection of TALES and STORIES. From the German. By J. E. TAYLOR. Illustrated by RICHARD DOYLE. Second Edition. Fcap. 8vo.
- FALKNER'S (FRED.) *Muck Manual for the Use of Farmers.* A Treatise on the Nature and Value of Manures. Second Edition. Fcap. 8vo. 5s.
- FAMILY RECEIPT-BOOK. A Collection of a Thousand Valuable and Useful Receipts. Fcap. 8vo. 5s. 6d.

- FANCOURT'S** (COL.) History of Yucatan, from its Discovery to the Close of the 17th Century. With Map. 8vo. 10s. 6d.
- FARRAR'S** (REV. A. S.) Science in Theology. Sermons Preached before the University of Oxford. 8vo. 9s.
- (F. W.) Origin of Language, based on Modern Researches. Fcap. 8vo. 5s.
- FEATHERSTONHAUGH'S** (O. W.) Tour through the Slave States of North America, from the River Potomac to Texas and the Frontiers of Mexico. Plates. 2 Vols. 8vo. 26s.
- FELLOWS' (SIR CHARLES)** Travels and Researches in Asia Minor, more particularly in the Province of Lydia. *New Edition.* Plates. Post 8vo. 9s.
- FERGUSON'S (JAMES)** Palaces of Nineveh and Persepolis Restored: an Essay on Ancient Assyrian and Persian Architecture. Woodcuts. 8vo. 16s.
- Handbook of Architecture. Being a Concise and Popular Account of the Different Styles prevailing in all Ages and Countries in the World. With a Description of the most remarkable Buildings. *Fifth Thousand.* With 800 Illustrations. 8vo. 26s.
- FERRIER'S (T. P.)** Caravan Journeys in Persia, Afghanistan, Herat, Turkistan, and Beloochistan, with Descriptions of Meshed, Balk, and Candahar, &c. *Second Edition.* Map. 8vo. 21s.
- History of the Afghans. Map. 8vo. 21s.
- FISHER'S** (REV. GEORGE) Elements of Geometry, for the Use of Schools. *Fifth Edition.* 18mo. 1s. 6d.
- First Principles of Algebra, for the Use of Schools. *Fifth Edition.* 18mo. 1s. 6d.
- FLOWER GARDEN (THE).** An Essay. By REV. THOMAS JAMES. Reprinted from the "Quarterly Review." Fcap. 8vo. 1s.
- FORBES' (C. S.)** Iceland; its Volcanoes, Geysers, and Glaciers. Illustrations. Post 8vo. 14s.
- FORD'S (RICHARD)** Handbook for Spain, Andalusia, Ronda, Valencia, Catalonia, Granada, Galicia, Arragon, Navarre, &c. *Third Edition.* 2 Vols. Post 8vo. 30s.
- Gatherings from Spain. Post 8vo. 3s. 6d.
- FORSTER'S (JOHN)** Arrest of the Five Members by Charles the First. A Chapter of English History re-written. Post 8vo. 12s.
- Debates on the Grand Remonstrance, 1641. With an Introductory Essay on English freedom under the Plantagenet and Tudor Sovereigns. *Second Edition.* Post 8vo. 12s.
- Oliver Cromwell, Daniel De Foe, Sir Richard Steele, Charles Churchill, Samuel Foote. Biographical Essays. *Third Edition.* Post 8vo. 12s.
- FORSYTH'S (WILLIAM)** Hortensius, or the Advocate: an Historical Essay on the Office and Duties of an Advocate. Post 8vo. 12s.
- History of Napoleon at St. Helena. From the Letters and Journals of Sir Hudson Lowe. Portrait and Maps. 3 Vols. 8vo. 46s.
- FORTUNES (ROBERT)** Narrative of Two Visits to the Tea Countries of China, between the years 1843-52, with full Descriptions of the Tea Plant. *Third Edition.* Woodcuts. 2 Vols. Post 8vo. 18s.
- Chinese, Inland, on the Coast, and at Sea. A Narrative of a Third Visit in 1853-56. Woodcuts. 8vo. 16s.

- FRANCE (HISTORY OF).** From the Conquest by the Gauls to the Death of Louis Philippe. By Mrs. MARKHAM. 56th Thousand. Woodcuts. 12mo. 6s.
- FRENCH (THE) in Algiers; The Soldier of the Foreign Legion—** and the Prisoners of Abd-el-Kadir. Translated by Lady DUFF Gordon. Post 8vo. 2s.
- GALTON'S (FRANCIS) Art of Travel; or, Hints on the Shifts and Contrivances available in Wild Countries. Third Edition.** Woodcuts. Post 8vo. 7s. 6d.
- GEOGRAPHICAL (THE) Journal.** Published by the Royal Geographical Society of London. 8vo.
- GERMANY (HISTORY OF).** From the Invasion by Marius, to the present time. On the plan of Mrs. MARKHAM. 57th Thousand. Woodcuts. 12mo. 6s.
- GIBBON'S (EDWARD) History of the Decline and Fall of the Roman Empire. A New Edition.** Preceded by his Autobiography. Edited, with Notes, by Dr. Wm. SMITH. Maps. 8 Vols. 8vo. 60s.
- (The Student's Gibbon); Being an Epitome of the Decline and Fall, incorporating the Researches of Recent Commentators. By Dr. Wm. SMITH. Ninth Thousand. Woodcuts. Post 8vo. 7s. 6d.
- GIFFARD'S (EDWARD) Deeds of Naval Daring; or, Anecdotes of the British Navy.** 2 Vols. Fcap. 8vo. 5s.
- GISBORNE'S (THOMAS) Essays on Agriculture. Third Edition.** Post 8vo. 5s.
- GLADSTONE'S (W. E.) Prayers arranged from the Liturgy for Family Use. Second Edition.** 12mo. 2s. 6d.
- GOLDSMITH'S (OLIVER) Works. A New Edition.** Printed from the last editions revised by the Author. Edited by PETER CUNNINGHAM. Vignettes. 4 Vols. 8vo. 30s. (Murray's British Classics.)
- GLEIG'S (REV. G. R.) Campaigns of the British Army at Washington and New Orleans.** Post 8vo. 2s.
- Story of the Battle of Waterloo. Compiled from Public and Authentic Sources. Post 8vo. 3s. 6d.
- Narrative of Sir Robert Sale's Brigade in Afghanistan, with an Account of the Seizure and Defence of Jellalabad. Post 8vo. 2s.
- Life of Robert Lord Clive. Post 8vo. 3s. 6d.
- Life and Letters of General Sir Thomas Munro. Post 8vo. 3s. 6d.
- GORDON'S (SIR ALEX. DUFF) Sketches of German Life, and Scenes from the War of Liberation.** From the German. Post 8vo. 3s. 6d.
- (LADY DUFF) Amber-Witch: the most interesting Trial for Witchcraft ever known. From the German. Post 8vo. 2s.
- French in Algiers. 1. The Soldier of the Foreign Legion. 2. The Prisoners of Abd-el-Kadir. From the French. Post 8vo. 2s.
- GOUGER'S (HENRY) Personal Narrative of Two Years' Imprisonment in Burmah. Second Edition.** Woodcuts. Post 8vo. 12s.
- GRANT'S (ASAHEL) Nestorians, or the Lost Tribes; containing Evidence of their Identity, their Manners, Customs, and Ceremonies; with Sketches of Travel in Ancient Assyria, Armenia, and Mesopotamia; and Illustrations of Scripture Prophecy. Third Edition.** Fcap. 8vo. 6s.

- GRENVILLE (THE) PAPERS.** Being the Public and Private Correspondence of George Grenville, his Friends and Contemporaries, during a period of 30 years.—Including his DIARY OF POLITICAL EVENTS while First Lord of the Treasury. Edited, with Notes, by W. J. SMITH. 4 Vols. 8vo. 16s. each.
- GREEK GRAMMAR FOR SCHOOLS.** Abridged from Matthiæ. By the BISHOP OF LONDON. Ninth Edition, revised by Rev. J. EDWARDS. 12mo. 3s.
- GREY'S (SIR GEORGE) Polynesian Mythology, and Ancient Traditional History of the New Zealand Race.** Woodcuts. Post 8vo. 10s. 6d.
- GROTE'S (GEORGE) History of Greece.** From the Earliest Times to the close of the generation contemporary with the death of Alexander the Great. Third Edition. Portrait and Maps. 12 vols. 8vo. 16s. each.
- Plato's Doctrine on the Rotation of the Earth, and Aristotle's Comment upon that Doctrine. Second Edition. 8vo. 1s. 6d.
- (MRS) Memoir of the Life of the late Ary Scheffer. Second Edition. Portrait. Post 8vo. 8s. 6d.
- GUSTAVUS VASA (History of), King of Sweden.** With Extracts from his Correspondence. Portrait. 8vo. 10s. 6d.
- HALLAM'S (HENRY) Constitutional History of England, from the Accession of Henry the Seventh to the Death of George the Second.** Seventh Edition. 3 Vols. 8vo. 36s.
- History of Europe during the Middle Ages. Tenth Edition. 3 Vols. 8vo. 80s.
- Introduction to the Literary History of Europe, during the 15th, 16th, and 17th Centuries. Fourth Edition. 3 Vols. 8vo. 86s.
- Literary Essays and Characters. Selected from the last work. Fcap. 8vo. 2s.
- Historical Works. Complete. Containing—History of England.—Middle Ages of Europe.—and Literary History of Europe. Cabinet Edition. 10 Vols. Post 8vo. 6s. each.
- HAMILTON'S (JAMES) Wanderings in Northern Africa, Benghazi, Cyrena, the Oasis of Siwah, &c.** Second Edition. Woodcuts. Post 8vo. 12s.
- HAMPDEN'S (BISHOP) Philosophical Evidence of Christianity, or the Credibility obtained to a Scripture Revelation from its Coincidence with the Facts of Nature.** 8vo. 9s. 6d.
- HARCOURT'S (EDWARD VERNON) Sketch of Madeira; with Map and Plates.** Post 8vo. 8s. 6d.
- HART'S ARMY LIST.** (Quarterly and Annually.) 8vo. 10s. 6d. and 21s.
- HAYS (J. H. DRUMMOND) Western Barbary, its wild Tribes and savage Animals.** Post 8vo. 2s.
- HEBER'S (BISHOP) Journey through the Upper Provinces of India, from Calcutta to Bombay, with a Journey to Madras and the Southern Provinces.** Twelfth Edition. 2 Vols. Post 8vo. 7s.
- Poetical Works. Sixth Edition. Portrait. Fcap. 8vo. 6s.
- Parish Sermons; on the Lessons, the Gospel, or the Epistle, for every Sunday in the Year, and for Week-day Festivals. Sixth Edition. 2 Vols. Post 8vo. 16s.
- Sermons Preached in England. Second Edition. 8vo. 9s. 6d.
- Hymns written and adapted for the Weekly Church Service of the Year. Twelfth Edition. 16mo. 2s.

HAND-BOOK—TRAVEL-TALK. In English, German, French, and Italian. 18mo. 3s. 6d.

— **NORTH GERMANY, HOLLAND, BELGIUM, and the Rhine to Switzerland.** Map. Post 8vo. 10s.

— **SOUTH GERMANY, Bavaria, Austria, Salzburg, the Austrian and Bavarian Alps, the Tyrol, and the Danube, from Ulm to the Black Sea.** Map. Post 8vo. 10s.

— **PAINTING.** The German, Flemish, and Dutch Schools. Edited by DR. WAAGEN. Woodcuts. 2 Vols. Post 8vo. 24s.

— **SWITZERLAND, Alps of Savoy, and Piedmont.** Maps. Post 8vo. 9s.

— **FRANCE, Normandy, Brittany, the French Alps, the Rivers Loire, Seine, Rhone, and Garonne, Dauphiné, Provence, and the Pyrenees.** Maps. Post 8vo. 10s.

— **PARIS AND ITS ENVIRONS.** Map. Post 8vo. (*Nearly Ready.*)

— **SPAIN, Andalusia, Ronda, Granada, Valencia, Catalonia, Galicia, Arragon, and Navarre.** Maps. 2 Vols. Post 8vo. 30s.

— **PORTUGAL, LISBON, &c.** Map. Post 8vo. 9s.

— **NORTH ITALY, Sardinia, Genoa, the Riviera, Venice, Lombardy, and Tuscany.** Map. Post 8vo. 12s.

— **CENTRAL ITALY, FLORENCE, SOUTH TUSCANY, and the PAPAL STATES.** Map. Post 8vo. 10s.

— **ROME AND ITS ENVIRONS.** Map. Post 8vo. 9s.

— **SOUTH ITALY, Naples, Pompeii, Herculaneum, Vesuvius, &c.** Map. Post 8vo. 10s.

— **SICILY.** Map. Post 8vo. (*In the Press.*)

— **PAINTING.** The Italian Schools. From the German of KÖNIG. Edited by SIR CHARLES EASTLAKE, R.A. Woodcuts. 2 Vols. Post 8vo. 30s.

— **LIVES OF THE EARLY ITALIAN PAINTERS, CIMABUE to BARRABO, AND PROGRESS OF PAINTING IN ITALY.** By MRS. JAMESON. Woodcuts. Post 8vo. 12s.

— **DICTIONARY OF ITALIAN PAINTERS.** By A LADY. Edited by RALPH WORNUM. With a Chart. Post 8vo. 6s. 6d.

— **GREECE, Ionian Islands, Albania, Thessaly, and Macedonia.** Maps. Post 8vo. 15s.

— **TURKEY, MALTA, ASIA MINOR, CONSTANTINOPLE, Armenia, Mesopotamia, &c.** Maps. Post 8vo. (*In the Press.*)

— **EGYPT, Thebes, the Nile, Alexandria, Cairo, the Pyramids, Mount Sinai, &c.** Map. Post 8vo. 15s.

— **SYRIA & PALESTINE.** Maps. 2 Vols. Post 8vo. 24s.

— **BOMBAY AND MADRAS.** [Map. 2 Vols. Post 8vo. 24s.

— **DENMARK, NORWAY and SWEDEN.** Maps. Post 8vo. 15s.

- HAND-BOOK—RUSSIA, THE BALTIC AND FINLAND.** Maps. Post 8vo. 12s.
- **KENT AND SUSSEX.** Map. Post 8vo. 10s.
- **SURREY, HANTS, and ISLE OF WIGHT.** Maps. Post 8vo. 7s. 6d.
- **MODERN LONDON.** A Complete Guide to the Metropolis. Map. 16mo. 6s.
- **LONDON, PAST AND PRESENT.** *Second Edition.* Post 8vo. 16s.
- **WESTMINSTER ABBEY.** Woodcuts. 16mo. 1s.
- **ENVIRONS OF LONDON.** Maps. Post 8vo. (*In preparation.*)
- **BERKS, BUCKS, AND OXFORDSHIRE.** Map. Post 8vo. 7s. 6d.
- **WILTS, DORSET, AND SOMERSET.** Map. Post 8vo. 7s. 6d.
- **DEVON AND CORNWALL.** Maps. Post 8vo. 7s. 6d.
- **SOUTHERN CATHEDRALS OF ENGLAND.** Winchester, Salisbury, Exeter, Wells, Chichester, Rochester, Canterbury. With 150 Illustrations. 2 Vols. Post 8vo. 24s.
- **NORTH AND SOUTH WALES.** Maps. 2 Vols. Post 8vo. 12s.
- **FAMILIAR QUOTATIONS.** From English Authors. *Third Edition.* Fcap. 8vo. 6s.
- **ARCHITECTURE.** In all Ages and Countries. By JAMES FERGUSON. *Fifth Thousand.* With 850 Illustrations. 8vo. 26s.
- **ARTS OF THE MIDDLE AGES.** By M. JULES LARABEE. With 200 Illustrations. 8vo. 18s.
- HEAD'S (SIR FRANCIS) Horse and his Rider.** *Fourth Thousand.* Woodcuts. Post 8vo. 6s.
- **Rapid Journeys across the Pampas and over the Andes.** Post 8vo. 2s.
- **Descriptive Essays.** 2 Vols. Post 8vo. 13s.
- **Bubbles from the Brunnen of Nassau.** By an OLD MAN. *Sixth Edition.* 16mo. 5s.
- **Emigrant.** *Sixth Edition.* Fcap. 8vo. 2s. 6d.
- **Stokers and Pokers; or, the North-Western Railway.** Post 8vo. 2s.
- **Defenceless State of Great Britain.** Post 8vo. 12s.
- **Faggot of French Sticks; or, Sketches of Paris.** *New Edition.* 2 Vols. Post 8vo. 12s.
- **Fortnight in Ireland.** *Second Edition.* Map. 8vo. 12s.
- **(SIR GEORGE) Forest Scenes and Incidents in Canada.** *Second Edition.* Post 8vo. 10s.
- **Home Tour through the Manufacturing Districts of England.** *Third Edition.* 2 Vols. Post 8vo. 12s.
- **(SIR EDMUND) Shall and Will; or, Two Chapters on Future Auxiliary Verbs.** *Second Edition, Enlarged.* Fcap. 8vo. 4s.

- HEIRESS (THE)** in Her Minority; or, The Progress of Character.
By the Author of "BERTHA'S JOURNAL." 3 Vols. 12mo. 18s.
- HERODOTUS.** A New English Version. Edited with Notes and Essays, historical, ethnographical, and geographical. By Rev. G. RAWLINSON, assisted by Sir HASSEY RAWLINSON and Sir J. G. WILKINSON. Second Edition. Maps and Woodcuts. 4 Vols. 8vo. 48s.
- HERVEY'S (Lord)** Memoirs of the Reign of George the Second, from his Accession to the Death of Queen Caroline. Edited, with Notes, by Mrs. CHAMBERLAIN. Second Edition. Portrait. 2 Vols. 8vo. 21s.
- HESSEY (Rev. Dr.).** Sunday—Its Origin, History, and Present Obligations. Being the Bampton Lectures for 1860. Second Edition. 8vo. 16s.
- HICKMAN'S (Wm.)** Treatise on the Law and Practice of Naval Courts-Martial. 8vo. 10s. 6d.
- HILLARD'S (G. S.)** Six Months in Italy. 2 Vols. Post 8vo. 16s.
- HOLLWAY'S (J. G.)** Month in Norway. Fcap. 8vo. 2s.
- HONEY BEE (THE).** An Essay. By REV. THOMAS JAMES. Reprinted from the "Quarterly Review." Fcap. 8vo. 1s.
- HOOK'S (Dean)** Church Dictionary. Eighth Edition. 8vo. 16s.
- Discourses on the Religious Controversies of the Day. 8vo. 9s.
- (THEODORE'S) Life. By J. G. LOCKHART. Reprinted from the "Quarterly Review." Fcap. 8vo. 1s.
- HOOKER'S (Dr. J. D.)** Himalayan Journals; or, Notes of an Oriental Naturalist in Bengal, the Sikkim and Nepal Himalayas, the Khasia Mountains, &c. Second Edition. Woodcuts. 2 Vols. Post 8vo.
- HOOPER'S (Lieut.)** Ten Months among the Tents of the Tsuki; with Incidents of an Arctic Boat Expedition in Search of Sir John Franklin. Plates. 8vo. 14s.
- HOPE'S (A. J. BRIDGESFORD)** English Cathedral of the Nineteenth Century. With Illustrations. 8vo. 12s.
- HORACE (Works of).** Edited by DEAN MILMAN. With 300 Woodcuts. Crown 8vo. 21s.
- (Life of). By DEAN MILMAN. Woodcuts, and coloured Borders. 8vo. 9s.
- HOSPITALS AND SISTERHOODS.** By A LADY. Fcap. 8vo. 3s. 6d.
- HUME'S (DAVID)** History of England, from the Invasion of Julius Cæsar to the Revolution of 1688. Abridged for Students. Correcting his errors, and continued to 1868. Twentieth Thousand. Woodcuts. Post 8vo. 1s. 6d.
- HUTCHINSON (Col.)** on the most expedient, certain, and easy Method of Dog-Breaking. Third Edition. Woodcuts. Post 8vo. 9s.
- HUTTON'S (H. E.)** Principia Græca; an Introduction to the Study of Greek. Comprehending Grammar, Dialectus, and Exercise-book, with Vocabularies. Second Edition. 12mo. 3s.

HOME AND COLONIAL LIBRARY. A Series of Works adapted for all circles and classes of Readers, having been selected for their acknowledged interest and ability of the Authors. Post 8vo. Published at 2s. and 3s. 6d. each, and arranged under two distinctive heads as follows :—

CLASS A.

HISTORY, BIOGRAPHY, AND HISTORIC TALES.

- | | |
|--|--|
| 1. SIEGE OF GIBRALTAR. By JOHN DRINKWATER. 2s. | 11. THE SIEGES OF VIENNA. By LORD ELLERBERRIE. 2s. |
| 2. THE AMBER-WITCH. By LADY DUFF GORDON. 2s. | 12. THE WAYSIDE CROSS. By CAPT. MILNAR. 2s. |
| 3. CROMWELL AND BUNYAN. By ROBERT SOUTHEY. 2s. | 13. SKETCHES OF GERMAN LIFE. By SIR A. GORDON. 3s. 6d. |
| 4. LIFE OF SIR FRANCIS DRAKE. By JOHN BARROW. 2s. | 14. THE BATTLE OF WATERLOO. By REV. G. R. GLEIG. 6s. 6d. |
| 5. CAMPAIGNS AT WASHINGTON. By REV. G. R. GLEIG. 2s. | 15. AUTOBIOGRAPHY OF STEPHENS. 2s. |
| 6. THE FRENCH IN ALGIERS. By LADY DUFF GORDON. 2s. | 16. THE BRITISH POETS. By THOMAS CAMPBELL. 3s. 6d. |
| 7. THE FALL OF THE JESUITS. 2s. | 17. HISTORICAL ESSAYS. By LORD MANRO. 3s. 6d. |
| 8. LIVONIAN TALES. 2s. | 18. LIFE OF LORD CLIVE. By REV. G. R. GLEIG. 5s. 6d. |
| 9. LIFE OF CONDE. By LORD MANRO. 3s. 6d. | 19. NORTH - WESTERN RAILWAY. By SIR F. B. HEAD. 2s. |
| 10. BALE'S BRIGADE. By REV. G. R. GLEIG. 2s. | 20. LIFE OF MUNRO. By REV. G. R. GLEIG. 5s. 6d. |

CLASS B.

VOYAGES, TRAVELS, AND ADVENTURES.

- | | |
|--|---|
| 1. BIBLE IN SPAIN. By GEORGE BORROW. 3s. 6d. | 15. LETTERS FROM MADRAS. By A. LAOT. 2s. |
| 2. GIPSIES OF SPAIN. By GEORGE BORROW. 3s. 6d. | 16. HIGHLAND SPORTS. By CHARLES ST. JOHN. 3s. 6d. |
| 3 & 4. JOURNALS IN INDIA. By BISHOP HARRIS. 2 Vols. 7s. | 17. PAMPAS JOURNEYS. By SIR F. B. HEAD. 2s. |
| 5. TRAVELS IN THE HOLY LAND. By IRBY and MANDLER. 2s. | 18. GATHERINGS FROM SPAIN. By RICHARD FORD. 3s. 6d. |
| 6. MOROCCO AND THE MOORS. By J. DRUMMOND HAY. 2s. | 19. THE RIVER AMAZON. By W. H. EDWARDS. 2s. |
| 7. LETTERS FROM THE BALTIC. By A. LADY. 2s. | 20. MANNERS & CUSTOMS OF INDIA. By REV. C. ACLAUD. 2s. |
| 8. NEW SOUTH WALES. By MRS. MEREDITH. 2s. | 21. ADVENTURES IN MEXICO. By G. F. RUXTON. 3s. 6d. |
| 9. THE WEST INDIES. By M. G. LEWIS. 2s. | 22. PORTUGAL AND GALLICIA. By LORD CANNARON. 3s. 6d. |
| 10. SKETCHES OF PERSIA. By SIR JOHN MALCOLM. 3s. 6d. | 23. BUSH LIFE IN AUSTRALIA. By REV. H. W. HAYGARTH. 2s. |
| 11. MEMOIRS OF FATHER RIPA. 2s. | 24. THE LIBYAN DESERT. By BAYLE ST. JOHN. 2s. |
| 12 & 13. TYPEE AND GMOO. By HERMAN MELVILLE. 2 Vols. 7s. | 25. SIERRA LEONE. By A. LADY. 3s. 6d. |
| 14. MISSIONARY LIFE IN CANADA. By REV. J. ARNOTT. 2s. | |

*. Each work may be had separately.

IRBY AND MANGLES' Travels in Egypt, Nubia, Syria, and the Holy Land. Post 8vo. 2s.

JAMES' (REV. THOMAS) Fables of Æsop. A New Translation, with Historical Preface. With 100 Woodcuts by TENNIEL and WOLF. *Thirty-eighth Thousand.* Post 8vo. 2s. 6d.

JAMESON'S (MRS.) Lives of the Early Italian Painters, from Cimabue to Bassano, and the Progress of Painting in Italy. *New Edition.* With Woodcuts. Post 8vo. 12s.

JERVISS (CAPT.) Manual of Operations in the Field. Post 8vo. 9s. 6d.

JESSE'S (EDWARD) Scenes and Occupations of Country Life. *Third Edition.* Woodcuts. Fcap. 8vo. 6s.

— **Cleanings in Natural History.** *Eighth Edition.* Fcap. 8vo. 6s.

JOHNSON'S (DR. SAMUEL) Life. By James Boswell. Including the Tour to the Hebrides. Edited by the late MR. CHOKER. Portrait. Royal 8vo. 10s.

— **Lives of the most eminent English Poets.** Edited by PETER CUNNINGHAM. 3 vols. 8vo. 22s. 6d. (Murray's British Classics.)

JOHNSTON'S (WM.) England: Social, Political, and Industrial, in 19th Century. 2 Vols. Post 8vo. 18s.

JOURNAL OF A NATURALIST. *Fourth Edition.* Woodcuts. Post 8vo. 9s. 6d.

JOWETT (REV. B.) on St. Paul's Epistles to the Thessalonians, Galatians, and Romans. *Second Edition.* 2 Vols. 8vo. 30s.

JONES' (REV. R.) Literary Remains. With a Prefatory Notice. By Rev. W. WHREWELL, D.D. Portrait. 8vo. 14s.

KEN'S (BISHOP) Life. By A. LAYMAN. *Second Edition.* Portrait. 2 Vols. 8vo. 19s.

— **Exposition of the Apostles' Creed.** Extracted from his "Practice of Divine Love." *New Edition.* Fcap. 1s. 6d.

— **Approach to the Holy Altar.** Extracted from his "Manual of Prayer" and "Practice of Divine Love." *New Edition.* Fcap. 8vo. 1s. 6d.

KING'S (REV. S. W.) Italian Valleys of the Alps; a Tour through all the Romantic and less-frequented "Valle" of Northern Piedmont. Illustrations. Crown 8vo. 18s.

— (REV. C. W.) **Antique Gems; their Origin, Use, and Value, as Interpreters of Ancient History, and as Illustrative of Ancient Art.** Illustrations. 8vo. 42s.

KING EDWARD VIth's Latin Grammar; or, an Introduction to the Latin Tongue, for the Use of Schools. *Fifteenth Edition.* 12mo. 8s. 6d.

— **First Latin Book; or, the Accidence, Syntax, and Prosody, with an English Translation for the Use of Junior Classes.** *Fourth Edition.* 12mo. 2s. 6d.

- KINGLAKE'S (A. W.)** History of the War in the Crimea. Based chiefly upon the Private Papers of Field Marshal Lord Raglan, and other authentic materials. Vols. I.—III. 8vo. (*In Preparation.*)
- KNAPP'S (J. A.)** English Roots and Ramifications; or, the Derivation and Meaning of Divers Words. Fcap. 8vo. 4s.
- KUGLER'S** Italian Schools of Painting. Edited, with Notes, by SIR CHARLES EASTLAKE. *Third Edition.* Woodcuts. 2 Vols. Post 8vo. 30s.
- German, Dutch, and Flemish Schools of Painting. Edited, with Notes, by DR. WAAGEN. *Second Edition.* Woodcuts. 2 Vols. Post 8vo. 24s.
- LABARTE'S (M. JULES)** Handbook of the Arts of the Middle Ages and Renaissance. With 200 Woodcuts. 8vo. 18s.
- LABORDE'S (LEON DE)** Journey through Arabia Petraea, to Mount Sinai, and the Excavated City of Petraea,—the Edom of the Prophets. *Second Edition.* With Plates. 8vo. 18s.
- LANE'S (R. W.)** Manners and Customs of the Modern Egyptians. A New Edition, with Additions and Improvements by the Author. Edited by E. STANLEY POOL. Woodcuts. 8vo. 18s.
- LATIN GRAMMAR (KING EDWARD VIth's).** For the Use of Schools. *Fifteenth Edition.* 12mo. 3s. 6d.
- First Book (KING EDWARD VIth's); or, the Accidence, Syntax, and Pro-ody, with English Translation for Junior Classes. *Fourth Edition.* 12mo. 2s. 6d.
- LAYARD'S (A. H.)** Nineveh and its Remains. Being a Narrative of Researches and Discoveries amidst the Ruins of Assyria. With an Account of the Chaldean Christians of Kurdistan; the Yezidis, or Devil-worshippers; and an Enquiry into the Manners and Arts of the Ancient Assyrians. *Sixth Edition.* Plates and Woodcuts. 2 Vols. 8vo. 36s.
- Nineveh and Babylon; being the Result of a Second Expedition to Assyria. *Fourteenth Thousand.* Plates. 8vo. 21s. Or Fine Paper, 2 Vols. 8vo. 30s.
- Popular Account of Nineveh. *15th Edition.* With Woodcuts. Post 8vo. 6s.
- LESLIE'S (C. R.)** Handbook for Young Painters. With Illustrations. Post 8vo. 10s. 6d.
- Autobiographical Recollections, with Selections from his Correspondence. Edited by TOM TAYLOR. Portrait. 2 Vols. Post 8vo. 18s.
- Life of Sir Joshua Reynolds. With an Account of his Works, and a Sketch of his Contemporaries. Fcap. 4to. (*In the Press.*)
- LEAKE'S (COL.)** Topography of Athens, with Remarks on its Antiquities. *Second Edition.* Plates. 2 Vols. 8vo. 30s.
- Travels in Northern Greece. Maps. 4 Vols. 8vo. 60s.
- Disputed Questions of Ancient Geography. Map. 8vo. 6s. 6d.
- Numismata Hellenica, and Supplement. Completing a descriptive Catalogue of Twelve Thousand Greek Coins, with Notes Geographical and Historical. With Map and Appendix. 4to. 63s.
- Peloponnesiaca. 8vo. 15s.]
- On the Degradation of Science in England. 8vo. 3s. 6d.

LETTERS FROM THE SHORES OF THE BALTIC. By a
LADY. Post 8vo. 2s.

Madras; or, Life and Manners in India. By
a LADY. oct 8vo. 2s.

Sierra Leone, written to Friends at Home.
By a LADY. Edited by Mrs. Norton. Post 8vo. 2s. 6d.

Head Quarters; or, The Realities of the War
in the Crimea. By a STAFF OFFICER. Plans. Post 8vo. 6s.

LEXINGTON (THE) PAPERS; or, Some Account of the Courts
of London and Vienna at the end of the 17th Century. Edited by Hon.
H. MANNING SUTTON. 8vo. 14s.

LEWIS (SIR G. C.) Essay on the Government of Dependencies.
8vo. 12s.

Glossary of Provincial Words used in Herefordshire and
some of the adjoining Counties. 12mo. 4s. 6d.

(LADY THERRA) Friends and Contemporaries of the
Lord Chancellor Clarendon, illustrative of Portraits in his Gallery.
With a Descriptive Account of the Pictures, and Origin of the Collec-
tion. Portraits. 3 Vols. 8vo. 42s.

(M. G.) Journal of a Residence among the Negroes in the
West Indies. Post 8vo. 2s.

LIDDELL'S (DEAN) History of Rome. From the Earliest Times
to the Establishment of the Empire. With the History of Literature
and Art. 3 Vols. 8vo. 28s.

Student's History of Rome. Abridged from the
Larger Work. Eighteenth Thousand. With 100 Woodcuts. Post 8vo.
7s. 6d.

LINDSAY'S (LORD) Lives of the Lindsays; or, a Memoir of the
Houses of Crawford and Balcarres. With Extracts from Official Papers
and Personal Narratives. Second Edition. 3 Vols. 8vo. 24s.

Report of the Claim of James, Earl of Crawford and
Balcarres, to the Original Dukedom of Montrose, created in 1466.
Folio. 15s.

Scepticism; a Retrogressive Movement in Theology
and Philosophy. 8vo. 2s.

LITTLE ARTHUR'S HISTORY OF ENGLAND. By LADY
CALLCOTT. 120th Thousand. With 20 Woodcuts. Fcap. 8vo. 2s. 6d.

LIVINGSTONE'S (REV. DR.) Missionary Travels and Researches
in South Africa; including a Sketch of Sixteen Years' Residence in
the Interior of Africa, and a Journey from the Cape of Good Hope to
Loanda on the West Coast; thence across the Continent, down the
River Zambesi, to the Eastern Ocean. Thirtieth Thousand. Map,
Plates, and Index. 8vo. 21s.

Popular Account of Travels in South Africa.

Condensed from the above. Map and Illustrations. Post 8vo. 6s.

LIVONIAN TALES. By the Author of "Letters from the
Baltic." Post 8vo. 2s.

LOCKHART'S (J. G.) Ancient Spanish Ballads. Historical and
Romantic. Translated, with Notes. Illustrated Edition. 4to. 21s. Or,
Popular Edition, Post 8vo. 2s. 6d.

Life of Robert Burns. Fifth Edition. Fcap. 8vo. 3s.

- LONDON** (BISHOP OF). *The Dangers and Safeguards of Modern Theology. Containing Suggestions to the Theological Student under present difficulties.* 8vo. 4s.
- LOUDON'S** (MRS.) *Instructions in Gardening for Ladies. With Directions and Calendar of Operations for Every Month.* Eighth Edition. Woodcuts. Fcap. 8vo. 6s.
- *Modern Botany; a Popular Introduction to the Natural System of Plants. Second Edition.* Woodcuts. Fcap. 8vo. 6s.
- LOWE'S** (SIR HUDSON) *Letters and Journals, during the Captivity of Napoleon at St. Helena.* By WILLIAM FORBSTER. Portrait. 3 Vols. 8vo. 45s.
- LUCKNOW:** *A Lady's Diary of the Siege.* Fourth Thousand. Fcap. 8vo. 4s. 6d.
- LYELL'S** (SIR CHARLES) *Principles of Geology; or, the Modern Changes of the Earth and its Inhabitants considered as illustrative of Geology.* Ninth Edition. Woodcuts. 8vo. 18s.
- *Visits to the United States, 1841-46. Second Edition.* Plates. 4 Vols. Post 8vo. 24s.
- MAHON'S** (LORD) *History of England, from the Peace of Utrecht to the Peace of Versailles, 1713-83.* Library Edition, 7 Vols. 8vo. 98s. Popular Edition, 7 Vols. Post 8vo. 35s.
- *Life of Right Hon. William Pitt, with Extracts from his MS. Papers.* Second Edition. Portrait. 4 Vols. Post 8vo. 42s.
- *"Forty-Five;" a Narrative of the Rebellion in Scotland.* Post 8vo. 3s.
- *History of British India from its Origin till the Peace of 1783.* Post 8vo. 8s. 6d.
- *History of the War of the Succession in Spain.* Second Edition. Map. 8vo. 15s.
- *Spain under Charles the Second; or, Extracts from the Correspondence of the Hon. ALEXANDER STANHOPE, British Minister at Madrid from 1690 to 1700.* Second Edition. Post 8vo. 6s. 6d.
- *Life of Louis, Prince of Condé, surnamed the Great.* Post 8vo. 3s. 6d.
- *Life of Belisarius.* Second Edition. Post 8vo. 10s. 6d.
- *Historical and Critical Essays.* Post 8vo. 3s. 6d.
- *Story of Joan of Arc.* Fcap. 8vo. 1s.
- *Addresses Delivered at Manchester, Leeds, and Birmingham.* Fcap. 8vo. 1s.
- M'CLINTOCK'S** (CAPT. SIR F. L.) *Narrative of the Discovery of the Fate of Sir John Franklin and his Companions in the Arctic Seas.* Twelfth Thousand. Illustrations. 8vo. 16s.
- M'COSH** (REV. DR.) *on the Intuitive Convictions of the Mind inductively Investigated.* 8vo. 12s.
- M'CULLOCH'S** (J. R.) *Collected Edition of RICARDO'S Political Works. With Notes and Memoir.* Second Edition. 8vo. 15s.
- MAINE** (H. SUMNER) *on Ancient Law: its Connection with the Early History of Society, and its Relation to Modern Ideas.* 8vo. 12s.

- MALCOLM'S** (SIR JOHN) Sketches of Persia. *Third Edition.* Post 8vo. 3s. 6d.
- MANSEL** (REV. H. L.) Limits of Religious Thought Examined. Being the Bampton Lectures for 1856. *Fourth Edition.* Post 8vo. 7s. 6d.
- MANTELL'S** (GIDEON A.) Thoughts on Animalcules; or, the Invisible World, as revealed by the Microscope. *Second Edition.* Plates. 16mo. 6s.
- MANUAL OF SCIENTIFIC ENQUIRY**, Prepared for the Use of Officers and Travellers. By various Writers. *Third Edition revised by the Rev. H. MAIN.* Maps. Post 8vo. 9s. (*Published by order of the Lords of the Admiralty.*)
- MARKHAM'S** (MRS.) History of England. From the First Invasion by the Romans, down to the fourteenth year of Queen Victoria's Reign. 118th Edition. Woodcuts. 12mo. 6s.
- History of France. From the Conquest by the Gauls, to the Death of Louis Philippe. *Sixtieth Edition.* Woodcuts. 12mo. 6s.
- History of Germany. From the Invasion by Marins, to the present time. *Fiftieth Edition.* Woodcuts. 12mo. 6s.
- A Smaller History of Greece. From the Earliest Times to the Roman Conquest. By Dr. WM. SMITH. Woodcuts. 16mo. 3s. 6d.
- A Smaller History of Rome, from the Earliest Times to the Establishment of the Empire. By Dr. WM. SMITH. Woodcuts. 16mo. 3s. 6d.
- MARKLAND'S** (J. H.) Reverence due to Holy Places. *Third Edition.* Fcap. 8vo. 2s.
- MARRYAT'S** (JOSEPH) History of Modern and Mediæval Pottery and Porcelain. With a Description of the Manufacture. *Second Edition.* Plates and Woodcuts. 8vo. 31s. 6d.
- (HORACE) Residence in Jutland, the Danish Isles, and Copenhagen. Illustrations. 2 Vols. Post 8vo. 24s.
- One Year in Sweden, including a Visit to the Isle of Gothland. Illustrations. 2 Vols. Post 8vo. 24s.
- MATTHIÆ'S** (AUGUSTUS) Greek Grammar for Schools. Abridged from the Larger Grammar. By Blomfield. *Ninth Edition.* Revised by EDWARDS. 12mo. 3s.
- MAUREL'S** (JULES) Essay on the Character, Actions, and Writings of the Duke of Wellington. *Second Edition.* Fcap. 8vo. 1s. 6d.
- MAWE'S** (H. L.) Journal of a Passage from the Pacific to the Atlantic. 8vo. 12s.
- MAXIMS AND HINTS** on Angling and Chess. To which is added the Miseries of Fishing. By RICHARD PENN. *New Edition.* Woodcuts. 12mo. 1s.
- MAYO'S** (DR.) Pathology of the Human Mind. Fcap. 8vo. 5s. 6d.
- MELVILLE'S** (HERMANN) Typee and Omoo; or, Adventures amongst the Marquesas and South Sea Islands. 2 Vols. Post 8vo. 7s.
- MENDELSSOHN'S** Life. By JULES BÉNÉDICT. 8vo. 2s. 6d.
- MEREDITH'S** (MRS. CHARLES) Notes and Sketches of New South Wales, during a Residence from 1839 to 1844. Post 8vo. 2s.
- Tasmania, during a Residence of Nine Years. With Illustrations. 2 Vols. Post 8vo. 18s.

- MERRIFIELD (MRS.)** on the Arts of Painting in Oil, Miniature, Mosaic, and Glass; Gilding, Dyeing, and the Preparation of Colours and Artificial Gems, described in several old Manuscripts. 2 Vols. 8vo. 80s.
- MESSIAH (THE).** By the Author of the "Life of Bishop Ker." Map. 8vo. 18s.
- MILLS' (ARTHUR)** India in 1858: A Summary of the Existing Administration—Political, Fiscal, and Judicial; with Laws and Public Documents, from the earliest to the present time. *Second Edition.* With Coloured Revenue Map. 8vo. 10s. 6d.
- MITCHELL'S (THOMAS)** Plays of Aristophanes. With English Notes. 8vo.—1. CLOUDS, 10s.—2. WASPS, 10s.—3. FROGS, 15s.
- MILMAN'S (DEAN)** History of Latin Christianity; including that of the Popes to the Pontificate of Nicholas V. *Second Edition.* 6 Vols. 8vo. 73s.
- Character and Conduct of the Apostles considered as an Evidence of Christianity. 8vo. 10s. 6d.
- Life and Works of Horace. With 300 Woodcuts. *New Edition.* 2 Vols. Crown 8vo. 30s.
- Poetical Works. Plates. 3 Vols. Fcap. 8vo. 18s.
- Fall of Jerusalem. Fcap. 8vo. 1s.
- (CAPT. E. A.) Wayside Cross; or, the Raid of Gomez. A Tale of the Carlist War. Post 8vo. 2s.
- MODERN DOMESTIC COOKERY.** Founded on Principles of Economy and Practical Knowledge, and adapted for Private Families. *New Edition.* Woodcuts. Fcap. 8vo. 5s.
- MOLTKE'S (BARON)** Russian Campaigns on the Danube and the Passage of the Balkan, 1828-9. Plans. 8vn. 14s.
- MONASTERY AND THE MOUNTAIN CHURCH.** By Author of "Sunlight through the Mist." Woodcuts. 16mo. 4s.
- MOORE'S (THOMAS)** Life and Letters of Lord Byron. Cabinet Edition. Plates. 6 Vols. Fcap. 8vo. 18s.
- Life and Letters of Lord Byron. Portraits. Royal 8vn. 9s.
- MOTLEY'S (J. L.)** History of the United Netherlands: from the Death of William the Silent to the Synod of Dort. Embracing the English-Dutch struggle against Spain; and a detailed Account of the Spanish Armada. *Fourth Thousand.* Portraits. 2 Vols. 8vo. 30s.
- MOZLEY'S (REV. J. B.)** Treatise on the Augustinian Doctrine of Predestination. 8vo. 14s.
- Primitive Doctrine of Baptismal Regeneration. 8vo. 7s. 6d.
- MUCK MANUAL (THE)** for the Use of Farmers. A Practical Treatise on the Chemical Properties, Management, and Application of Manures. By FREDERICK FALKNER. *Second Edition.* Fcap. 8vo. 6s.
- MUNDY'S (GEN.)** Pen and Pencil Sketches during a Tour in India. *Third Edition.* Plates. Post 8vn. 7s. 6d.
- MUNRO'S (GENERAL SIR THOMAS)** Life and Letters. By the REV. G. R. GLEN. Post 8vo. 2s. 6d.
- MURCHISON'S (SIR RODERICK)** Russia in Europe and the Ural Mountains; Geologically Illustrated. With Coloured Maps, Plates, Sections, &c. 2 Vols. Royal 4to.
- Siluria; or, a History of the Oldest Rocks containing Organic Remains. *Third Edition.* Map and Plates. 8vo. 42s.

MURRAY'S RAILWAY READING. For all classes of Readers.

[The following are published:]

- | | |
|--------------------------------------|-------------------------------------|
| WELLINGTON. By Lord ELSBURN. 6d. | MARCO'S JOURN. ON AFR. 1s. |
| NIMROD ON THE CHACE, 1s. | HEAD'S EMIGRANT. 2s. 6d. |
| ESSAYS FROM "THE TIMES." 3 Vols. 3s. | NIMROD ON THE ROAD. 1s. |
| MUSIC AND DRESS. 1s. | WILKINSON'S ANCIENT EGYPTIANS. 12s. |
| LETTER'S ACCOUNT OF NIMROD. 1s. | CLARENCE ON THE GUILLOTINE. 1s. |
| MILMAN'S FALL OF JERUSALEM. 1s. | HOLWAY'S NORWAY. 2s. |
| MARCO'S "FORTY-FIVE." 3s. | MAUREL'S WELLINGTON. 1s. 6d. |
| LIFE OF THOMAS HOOD. 1s. | CAMPBELL'S LIFE OF BACON. 3s. 6d. |
| DEEDS OF NATAL DANCING. 2 Vols. 1s. | THE FLOWER GARDEN. 1s. |
| THE HOSTS BAR. 1s. | LOCKHART'S SPANISH BALLADS. 2s. 6d. |
| JAMES' MOOT'S FABLES. 2s. 6d. | LOCHES ON HISTORY. 6d. |
| NIMROD ON THE TURF. 1s. 6d. | BRANTON OF BYRON. 3s. |
| OLIPHANT'S NEPAUL. 2s. 6d. | TAYLOR'S NOTES FROM LIFE. 3s. |
| ART OF DISING. 1s. 6d. | SELECTED ADDRESSERS. 1s. |
| HALLAM'S LITERARY ESSAYS. 3s. | FAIR'S LISTS ON AFRICA. 1s. |

MURRAY'S (CAPT. A.) Naval Life and Services of Admiral Sir Philip Durham. 8vo. 6s. 6d.

MUSIC AND DRESS. Two Essays, by a Lady. Reprinted from the "Quarterly Review." Fcap. 8vo. 1s.

NAPIER'S (SIR WM.) English Battles and Sieges of the Peninsular War. Third Edition. Portrait. Post 8vo. 10s. 6d.

— Life of General Sir Charles Napier; chiefly derived from his Journals, Letters, and Familiar Correspondence. Second Edition. Portraits. 4 Vols. Post 8vo. 48s.

NAUTICAL ALMANACK (The). Royal 8vo. 2s. 6d. (Published by Authority.)

NAVY LIST (The Quarterly). (Published by Authority.) Post 8vo. 2s. 6d.

NELSON (ROBERT), Memoir of his Life and Times. By Rev. C. T. SECRETAN, M.A. Portrait. 8vo. 10s. 6d.

NEWBOLD'S (LIEUT.) Straits of Malacca, Penang, and Singapore. 2 Vols. 8vo. 25s.

NEWDEGATES (C. N.) Customs' Tariffs of all Nations; collected and arranged up to the year 1835. 4to. 30s.

NICHOLLS' (SIR GEORGE) History of the English Poor-Laws. 2 Vols. 8vo. 25s.

— History of the Irish Poor-Law. 8vo. 14s.

— History of the Scotch Poor-Law. 8vo. 12s.

(Rev. H. G.) Historical and Descriptive Account of the Forest of Dean: from Sources Public, Private, Legendary, and Local. Woodcuts, &c. Post 8vo. 10s. 6d.

NICOLAS' (SIR HARRIS) Historic Peerage of England. Exhibiting the Origin, Descent, and Present State of every Title of Peerage which has existed in this Country since the Conquest. Being a New Edition of the "Synopsis of the Peerage." Revised and Continued to the Present Time. By WILLIAM COURTNEY, Somerset Herald. 8vo. 30s.

NIMROD On the Chace—The Turf—and The Road. Reprinted from the "Quarterly Review." Woodcuts. Fcap. 8vo. 3s. 6d.

O'CONNOR'S (R.) Field Sports of France; or, Hunting, Shooting, and Fishing on the Continent. Woodcuts. 12mo. 7s. 6d.

OLIPHANT'S (LAURENCE) Journey to Katmandu, with Visit to the Camp of the Nepalese Ambassador. Fcap. 8vo. 2s. 6d.

- OXENHAM'S** (REV. W.) English Notes for Latin Elegiacs; designed for early Prolucents in the Art of Latin Versification, with Prefatory Rules of Composition in Elegiac Metre. *Fourth Edition.* 12mo. 3s. 6d.
- PAGETS** (JOHN) Hungary and Transylvania. With Remarks on their Condition, Social, Political, and Economical. *Third Edition.* Woodcuts. 2 Vols. 8vo. 18s.
- PARIS** (DR.) Philosophy in Sport made Science in Earnest; or, the First Principles of Natural Philosophy indicated by aid of the Toys and Sports of Youth. *Eighth Edition.* Woodcuts. Post 8vo. 7s. 6d.
- PARKYNS** (MANSFIELD) Personal Narrative of Three Years' Residence and Adventures in Abyssinia. Woodcuts. 2 Vols. 8vo. 30s.
- PEEL'S** (SIR ROBERT) Memoirs. Left in MSS. Edited by EARL STANHOPE and the Right Hon. EDWARD CARDWELL. 2 Vols. Post 8vo. 7s. 6d. each.
- PEILES** (REV. DR.) Agamemnon and Choephore of Æschylus. A New Edition of the Text, with Notes. *Second Edition.* 2 Vols. 8vo. 9s. each.
- PENN'S** (RICHARD) Maxims and Hints for an Angler and Chess-player. *New Edition.* Woodcuts. Fcap. 8vo. 1s.
- PENROSE'S** (REV. JOHN) Faith and Practice; an Exposition of the Principles and Duties of Natural and Revealed Religion. Post 8vo. 8s. 6d.
- (F. C.) Principles of Athenian Architecture, and the Optical Refinements exhibited in the Construction of the Ancient Buildings at Athens, from a Survey. With 40 Plates. Folio. 6l. 5s.
- PERCYS** (JOHN, M.D.) Metallurgy; or, the Art of Extracting Metals from their Ores and adapting them to various purposes of Manufacture. *First Division* — Slags, Fire-Clays, Fuel-Copper, Zinc, and Brass. Illustrations. 8vo. 21s.
- PERRY'S** (SIR ESKINE) Bird's-Eye View of India. With Extracts from a Journal kept in the Provinces, Nipaul, &c. Fcap. 8vo. 5s.
- PHILLIPS** (JOHN) Memoirs of William Smith, LL.D. (the Geologist). Portrait. 8vo. 7s. 6d.
- Geology of Yorkshire, The Yorkshire Coast, and the Mountain-Limestone District. Plates. 4to. Part I., 20s. — Part II., 30s.
- Rivers, Mountains, and Sea Coast of Yorkshire. With Essays on the Climate, Scenery, and Ancient Inhabitants of the Country. *Second Edition.* with 36 Plates. 8vo. 15s.
- PHILPOTTS** (BISHOP) Letters to the late Charles Butler, on the Theological parts of his "Book of the Roman Catholic Church;" with Remarks on certain Works of Dr. Milner and Dr. Lingard, and on some parts of the Evidence of Dr. Doyle. *Second Edition.* 8vo. 16s.
- PHIPPS** (HON. EDMUND) Memoir, Correspondence, Literary and Unpublished Diaries of Robert Plumer Ward. Portrait. 2 Vols. 8vo. 28s.
- POPE'S** (ALEXANDER) Life and Works. *A New Edition.* Containing nearly 500 unpublished Letters. Edited with a New Life, Introductions and Notes. By REV. WHITWALL ELWIN. Portraits. Vol. I. 8vo. (*In the Press.*)
- PORTER'S** (REV. J. L.) Five Years in Damascus. With Travels to Palmyra, Lebanon, and other Scripture Sites. Map and Woodcuts. 2 Vols. Post 8vo. 21s.
- Handbook for Syria and Palestine; including an Account of the Geography, History, Antiquities, and Inhabitants of these Countries, the Peninsula of Sinai, Edom, and the Syrian Desert. Maps. 2 Vols. Post 8vo. 24s.
- (MRS.) Rational Arithmetic for Schools and for Private Instruction. 12mo. 3s. 6d.
- PRAYER-BOOK** (The Illustrated), with 1000 Illustrations of Borders, Initials, Fignettes, &c. Medium 8vo. 21s.

PRECEPTS FOR THE CONDUCT OF LIFE. Extracted from the Scriptures. *Second Edition.* Fcap. 8vo. 1s.

PRINSEP'S (JAS.) Essays on Indian Antiquities, Historie, Numismatic, and Palæographic, with Tables. Edited by EDWARD THOMAS. Illustrations. 2 Vols. 8vo. 52s. 6d.

PROGRESS OF RUSSIA IN THE EAST. An Historical Summary, continued to the Present Time. *Third Edition.* Map. 8vo. 6s. 6d.

PUSS IN BOOTS. With 12 Illustrations; for Old and Young. By OTTO SPECKTER. 16mo. 1s. 6d.; or Coloured, 2s.

QUARTERLY REVIEW (THE). 8vo. 6s.

RAWLINSON'S (REV. GEORGE) Herodotus. A New English Version. Edited with Notes and Essays. Assisted by SIR HENRY RAWLINSON and SIR J. G. WILKINSON. *Second Edition.* Maps and Woodcut. 4 Vols. 8vo. 48s.

Historical Evidences of the truth of the Scripture Records stated anew, with special reference to the Doubts and Discoveries of Modern Times; the Bampton Lectures for 1859. *Second Edition.* 8vo. 14s.

Five Great Monarchies of the Ancient World. Or the History, Geography, and Antiquities of Chaldaea, Assyria, Baby-lonia, Media, and Persia. Illustrations. Vol. I. 8vo.

REJECTED ADDRESSES (THE). By JAMES AND HORACE SMITH. *New Edition.* Fcap. 8vo. 1s., or *Fine Paper*, with Portrait, fcap. 8vo. 5s.

RICARDO'S (DAVID) Political Works. With a Notice of his Life and Writings. By J. R. MCCULLOCH. *New Edition.* 8vo. 16s.

RIPA'S (FATHER) Memoirs during Thirteen Years' Residence at the Court of Peking. From the Italian. Post 8vo. 2s.

ROBERTSON'S (CANON) History of the Christian Church, From the Apostolic Age to the Concordat of Worms, A.D. 1123. *Second Edition.* 2 Vols. 8vo.

Life of Archbishop Becket. Illustrations. Post 8vo. 9s.

ROBINSON'S (REV. DR.) Biblical Researches in the Holy Land. Being a Journal of Travels in 1838, and of Later Researches in 1852. Maps. 3 Vols. 8vo. 36s.

BOMILLY'S (SIR SAMUEL) Memoirs and Political Diary. By his Son. *Third Edition.* Portrait. 2 Vols. Fcap. 8vo. 12s.

ROSS'S (SIR JAMES) Voyage of Discovery and Research in the Southern and Antarctic Regions, 1839-43. Plates. 2 Vols. 8vo. 36s.

BOWLAND'S (DAVID) Manual of the English Constitution; a Review of its Rise, Growth, and Present State. Post 8vo. 10s. 6d.

RUNDELL'S (MRS.) Domestic Cookery, founded on Principles of Economy and Practice, and adapted for Private Families. *New and Revised Edition.* Woodcuts. Fcap. 8vo. 5s.

RUSSELL'S (J. RUTHERFORD, M.D.) Art of Medicine—Its History and its Heroes. Portraits. 8vo. 14s.

RUSSIA; A Memoir of the Remarkable Events which attended the Accession of the Emperor Nicholas. By BARON M. KOEPP, Secretary of State. 8vo. 10s. 6d. (*Published by Imperial Command.*)

RUXTON'S (GEORGE F.) Travels in Mexico; with Adventures among the Wild Tribes and Animals of the Prairies and Rocky Mountains. Post 8vo. 3s. 6d.

- SALES (LADY)** *Journal of the Disasters in Afghanistan.* Post 8vo. 12s.
- (SIR ROBERT) *Brigade in Afghanistan. With an Account of the Defence of Jellalabad.* By REV. G. R. GLAIS. Post 8vo. 2s.
- SANDWITH'S (HUMPHRY)** *Siege of Kara and Resistance by the Turkish Garrison under General Williams.* Post 8vo. 3s. 6d.
- SCOTT'S (G. GILBERT)** *Secular and Domestic Architecture, Present and Future.* *Second Edition.* 8vo. 9s.
- (Master of Balliol) *Sermons Preached before the University of Oxford.* Post 8vo. 3s. 6d.
- SCROPE'S (WILLIAM)** *Days of Deer-Stalking; with some Account of the Red Deer.* *Third Edition.* Woodcuts. Crown 8vo. 20s.
- *Days and Nights of Salmon Fishing in the Tweed; with a short Account of the Salmon.* *Second Edition.* Woodcuts. Royal 8vo. 31s. 6d.
- (G. P.) *Memoir of Lord Sydenham, and his Administration in Canada.* *Second Edition.* Portrait. 8vo. 9s. 6d.
- *Geology and Extinct Volcanoes of Central France.* *Second Edition.* Illustrations. Medium 8vo. 30s.
- SELF-HELP.** With Illustrations of Character and Conduct. By SAMUEL SMILES. *Fortieth Thousand.* Post 8vo. 6s.
- SENIOR'S (N. W.)** *Suggestions on Popular Education.* 8vo. 9s.
- SHAFTESBURY (LORD CHANCELLOR);** *Memoirs of his Early Life.* With his Letters, &c. By W. D. CHRISTIE. Portrait. 8vo. 10s. 6d.
- SHAW'S (J. F.)** *Outlines of English Literature for Students.* *Second Edition.* Revised. Post 8vo. (*In the Press.*)
- SIERRA LEONE;** *Described in Letters to Friends at Home.* By A LADY. Post 8vo. 3s. 6d.
- SMILES' (SAMUEL)** *Lives of Engineers; with an Account of their Principal Works, and a History of Inland Communication in Britain.* From the earliest Period to the Death of Telford. Portraits and numerous Woodcuts. 2 Vols. 8vo. 42s.
- *Story of the Life of George Stephenson.* Woodcuts. *Eighteenth Thousand.* Post 8vo. 6s.
- *Self-Help.* With Illustrations of Character and Conduct. *Fortieth Thousand.* Post 8vo. 6s.
- *Workmen's Earnings, Savings, and Strikes.* *Fifth Thousand.* Fcap. 8vo. 1s. 6d.
- SOMERVILLE'S (MARY)** *Physical Geography.* *Fifth Edition.* Portrait. Post 8vo.
- *Connexion of the Physical Sciences.* *Ninth Edition.* Woodcuts. Post 8vo. 9s.
- SOUTH'S (JOHN F.)** *Household Surgery; or, Hints on Emergencies.* *Seventeenth Thousand.* Woodcuts. Fcp. 8vo. 4s. 6d.
- SOUTHEY'S (ROBERT)** *Book of the Church.* *Seventh Edition.* Post 8vo. 7s. 6d.
- *Lives of Bunyan & Cromwell.* Post 8vo. 2s.
- SPECKTER'S (OTTO)** *Puss in Boots.* With 12 Woodcuts. Square 12mo. 1s. 6d. plain, or 2s. coloured.
- *Charmed Roe; or, the Story of the Little Brother and Sister.* Illustrated. 16mo.

SMITH'S (DR. WM.) Dictionary of the Bible; its Antiquities, Biography, Geography, and Natural History. *Second Edition.* Woodcuts. Vol. I. 8vo. 42s.

— Greek and Roman Antiquities. *2nd Edition.* Woodcuts. 8vo. 42s.

— Biography and Mythology. Woodcuts, 8 Vols. 8vo. 5l. 15s. 6d.

— Geography. Woodcuts. 2 Vols. 8vo. 80s.

— Latin-English Dictionary. Based upon the Works of Forcellini and Freund. *Ninth Thousand.* 8vo. 71s.

— English-Latin Dictionary. 8vo. & 12mo. (*In preparation.*)

— Mediæval Latin-English Dictionary. Based on the Work of DUCANOS. 8vo. (*In preparation.*)

— Classical Dictionary. *5th Edition.* 750 Woodcuts. 8vo. 18s.

— Smaller Classical Dictionary. *Twentieth Thousand.* 200 Woodcuts. Crown 8vo. 7s. 6d.

— Dictionary of Antiquities. *Sixteenth Thousand.* 200 Woodcuts. Crown 8vo. 7s. 6d.

— Latin-English Dictionary. *Twenty-fifth Thousand.* Square 12mo. 7s. 6d.

— Principia Latina—Part I. A Grammar, Delectus, and Exercise Book, with Vocabularies. *2nd Edition.* 12mo. 3s. 6d.

— Principia Latina—Part II. A Reading-book, Mythology, Geography, Roman Antiquities, and History. With Notes and Dictionary. 12mo. 3s. 6d.

— A First Latin Dictionary; applicable for those reading Plautus, Cornelius Nepos, and Cæsar. 12mo. 3s. 6d.

— Principia Græca; a First Greek Course. A Grammar, Delectus, and Exercise-book with Vocabularies. By H. E. HUTTON, M.A. *2nd Edition.* 12mo. 3s.

— (JAMES & HORACE) Rejected Addresses. Fcap. 8vo. 1s.; or *Fine Paper*, with Portrait, fcap. 8vo. 5s.

— (THOMAS ASHETON) Life and Pursuits. By SIR EARDLEY WILMOT. *2nd Edition.* Illustrations. 8vo. 15s.

STANLEY'S (CAROL) Lectures on the History of the Eastern Church. *Second Edition.* Plans. 8vo. 16s.

— Lectures on the History of the Jewish Church. From ABRAHAM TO SAMUEL. 8vo. (*In the Press.*)

— Unity of Evangelical and Apostolical Teaching. *Second Edition.* Fcap. 8vo. 7s. 6d.

— St. Paul's Epistles to the Corinthians, with Notes and Dissertations. *Second Edition.* 8vo. 18s.

— Historical Memorials of Canterbury. *Third Edition.* Woodcuts. Post 8vo. 7s. 6d.

— Sinai and Palestine, in Connexion with their History. *Sixth Edition.* Map. 8vo. 16s.

— ADDRESSES AND CHARGES OF BISHOP STANLEY. With Memoir. *Second Edition.* 8vo. 10s. 6d.

ST. JOHN'S (CHARLES) Wild Sports and Natural History of the Highlands. Post 8vo. 3s. 6d.

— (BAYLE) Adventures in the Libyan Desert and the Oasis of Jupiter Ammon. Woodcuts. Post 8vo. 2s.

- STEPHENSON (GEORGE) The Railway Engineer. The Story of his Life. By SAMUEL SMILES. *Eighteenth Thousand*. Woodcuts. Post 8vo. 6s.
- STOTHARD'S (THOS.) Life. With Personal Reminiscences. By Mrs. BRAY. With Portrait and 60 Woodcuts. 4to.
- STREETS (G. E.) Brick and Marble Architecture of Italy in the Middle Ages. Plates. 8vo. 21s.
- STRIFE FOR THE MASTERY. Two Allegories. With Illustrations. Crown 8vo. 6s.
- STUDENTS HUME. A History of England from the Invasion of Julius Cesar to the Revolution of 1688. Based on the Work by DAVID HUME. Continued to 1838. *Twentieth Thousand*. Woodcuts. Post 8vo. 7s. 6d.
- HISTORY OF FRANCE; From the Earliest Times to the Establishment of the Second Empire, 1802. Woodcuts. Post 8vo. 7s. 6d.
- HISTORY OF GREECE; from the Earliest Times to the Roman Conquest. With the History of Literature and Art. By Wm. SMITH, LL.D. *20th Thousand*. Woodcuts. Crown 8vo. 7s. 6d. (Questions. 2s.)
- * A SMALLER HISTORY OF GREECE, for Junior Classes. 12mo. 3s. 6d.
- HISTORY OF ROME; from the Earliest Times to the Establishment of the Empire. With the History of Literature and Art. By H. G. LIDDELL, D.D. *20th Thousand*. Woodcuts. Crown 8vo. 7s. 6d.
- * A SMALLER HISTORY OF ROME, for Junior Classes. By Dr. Wm. SMITH. 12mo. 3s. 6d.
- GIBBON; an Epitome of the History of the Decline and Fall of the Roman Empire. Incorporating the Researches of Recent Commentators. *9th Thousand*. Woodcuts. Post 8vo. 7s. 6d.
- MANUAL OF ANCIENT GEOGRAPHY. Based on the larger Dictionary of Greek and Roman Geography. Woodcuts. Post 8vo. 9s.
- THE ENGLISH LANGUAGE; A Series of Lectures. By GEORGE P. ASH. Post 8vo. 7s. 6d.
- SWIFT'S (JONATHAN) Life, Letters and Journals. By JOHN FORSTER. 8vo. (*In Preparation*.)
- Works. Edited, with Notes. By JOHN FORSTER. 8vo. (*In Preparation*.)
- SYMES (JAS.) Principles of Surgery. *Fourth Edition*. 8vo. 14s.
- TAIT'S (BISHOP) Dangers and Safeguards of Modern Theology. 8vo. 9s.
- TAYLOR'S (HENRY) Notes from Life. Fcap 8vo. 2s.
- THOMSON'S (BISHOP) Sermons Preached in Lincoln's Inn Chapel. 8vo. 10s. 6d.
- (Dr.) Story of New Zealand; Past and Present — Savage and Civilised. *Second Edition*. Illustrations. 2 Vols. Post 8vo. 24s.
- THREE-LEAVED MANUAL OF FAMILY PRAYER; arranged so as to save the trouble of turning the Pages backwards and forwards. Royal 8vo. 2s.

- TICKNOR'S (GEOOR)** History of Spanish Literature. With Criticisms on particular Works, and Biographical Notices of Prominent Writers. *Second Edition.* 3 Vols. 8vo. 24s.
- TOCQUEVILLE'S (M. DE)** State of France before the Revolution, 1789, and on the Causes of that Event. Translated by HENRY REEVE, Esq. 8vo. 14s.
- TREMENHEERE'S (H. S.)** Political Experience of the Ancients, in its bearing on Modern Times. Fcap. 8vo. 2s. 6d.
-
- Notes on Public Subjects, made during a Tour in the United States and Canada. Post 8vo. 10s. 6d.
-
- Constitution of the United States compared with our own. Post 8vo. 9s. 6d.
- TRISTRAM'S (H. B.)** Great Sahara; or, Wanderings South of the Atlas Mountains. Illustrations. Post 8vo. 15s.
- TWISS' (HORACE)** Public and Private Life of Lord Chancellor Eldon, with Selections from his Correspondence. Portrait. *Third Edition.* 2 Vols. Post 8vo. 21s.
- TYNDALL'S (JOHN)** Glaciers of the Alps. Being a Narrative of various Excursions among them, and an Account of Three Years' Observations and Experiments on their Motion, Structure, and General Phenomena. Woodcuts. Post 8vo. 14s.
- TYTLER'S (PATRICK FRASER)** Memoirs. By REV. J. W. BURGON, M.A. *Second Edition.* 8vo. 9s.
- UBICINI'S (M. A.)** Letters on Turkey and its Inhabitants—the Moslems, Greeks, Armenians, &c. Translated by LADY EASTHOPE. 2 Vols. Post 8vo. 91s.
- VAUGHAN'S (REV. DR.)** Sermons preached in Harrow School. 8vo. 10s. 6d.
- VENABLES' (REV. B. L.)** Domestic Scenes in Russia during a Year's Residence, chiefly in the Interior. *Second Edition.* Post 8vo. 5s.
- VOYAGE to the Mauritius and back, touching at the Cape of Good Hope and St. Helena.** By Author of "PADDIANA." Post 8vo. 9s. 6d.
- WAAGEN'S (DR.)** Treasures of Art in Great Britain. Being an Account of the Chief Collections of Paintings, Sculpture, Manuscripts, Miniatures, &c. &c., in this Country. Obtained from Personal Inspection during Visits to England. 3 Vols. 8vo. 86s.
-
- Galleries and Cabinets of Art in England. Being an Account of more than Forty Collections, visited in 1854-56. With Index. 8vo. 15s.
- WADDINGTON'S (DEAN)** Condition and Prospects of the Greek Church. *New Edition.* Fcap. 8vo. 3s. 6d.
- WAKEFIELD'S (E. J.)** Adventures in New Zealand. With some Account of the Beginning of the British Colonisation of the Island. Map. 2 Vols. 8vo. 28s.
- WALKS AND TALKS.** A Story-book for Young Children. By AUNT IDA. With Woodcuts. 16mo. 5s.
- WALSH'S (SIR JOHN)** Practical Results of the Reform Bill of 1832. 8vo. 5s. 6d.
- WARD'S (ROBERT PLUMER)** Memoir, Correspondence, Literary and Unpublished Diaries and Remains. By the HON. EDMUND PEARCE. Portrait. 2 Vols. 8vo. 25s.

- WATTS (JAMES)** Life. Incorporating the most interesting passages from his Private and Public Correspondence. By JAMES P. MUIRHEAD, M.A. *Second Edition*. Portrait. 8vo. 16s.
- Origin and Progress of his Mechanical Inventions. Illustrated by his Correspondence. By J. P. MUIRHEAD. Plates. 3 Vols. 8vo. 45s.
- WILKIE'S (SIR DAVID)** Life, Journals, Tours, and Critical Remarks on Works of Art, with a Selection from his Correspondence. By ALLAN CUNNINGHAM. Portrait. 3 Vols. 8vo. 42s.
- WOOD'S (LIEUT.)** Voyage up the Indus to the Source of the River Oxus, by Kabul and Badakhshan. Map. 8vo. 14s.
- WELLINGTON'S (THE DUKE OF)** Despatches during his various Campaigns. Compiled from Official and other Authentic Documents. By COL. GURWOOD. C.B. *New Enlarged Edition*. 8 Vols. 8vo. 71s. each.
- Supplementary Despatches, and other Papers. Edited by his Son. Vols. I. to IX. 8vo. 20s. each.
- Selections from his Despatches and General Orders. By COLONEL GURWOOD. 8vo. 18s.
- Speeches in Parliament. 2 Vols. 8vo. 42s.
- WILKINSON'S (SIR J. G.)** Popular Account of the Private Life, Manners, and Customs of the Ancient Egyptians. *New Edition*. Revised and Condensed. With 800 Woodcuts. 3 Vols. Post 8vo. 12s.
- Dalmatia and Montenegro; with a Journey to Mostar in Herzegovina, and Remarks on the Slavonic Nations. Plates and Woodcuts. 2 Vols. 8vo. 42s.
- Handbook for Egypt.—Thebes, the Nile, Alexandria, Cairo, the Pyramids, Mount Sinai, &c. Map. Post 8vo. 15s.
- On Colour, and on the Necessity for a General Diffusion of Taste among all Classes; with Remarks on laying out Dressed or Geometrical Gardens. With Coloured Illustrations and Woodcuts. 8vo. 18s.
- (G. B.) Working Man's Handbook to South Australia; with Advice to the Farmer, and Detailed Information for the several Classes of Labourers and Artisans. Map. 18mo. 1s. 6d.
- WILSON'S (DANIEL, D.D., BISHOP OF CALCUTTA)** Life, with Extracts from his Letters and Journals. By Rev. JOSHUA BATEMAN. *New and Condensed Edition*. Illustrations. Post 8vo. 9s.
- (GENL. SIR ROBERT) Secret History of the French Invasion of Russia, and Retreat of the French Army, 1812. *Second Edition*. 8vo. 15s.
- Private Diary of Travels, Personal Services, and Public Events, during Missions and Employments in Spain, Sicily, Turkey, Russia, Poland, Germany, &c. 1812-14. 2 Vols. 8vo. 36s.
- WORDSWORTH'S (REV. DR.)** Journal of a Tour in Athens and Attica. *Third Edition*. Plates. Post 8vo. 8s. 6d.
- Pictorial, Descriptive, and Historical Account of Greece, with a History of Greek Art, by G. SCHARF, F.S.A. *New Edition*. With 800 Woodcuts. Royal 8vo. 35s.
- WORNUM (RALPH)** A Biographical Dictionary of Italian Painters: with a Table of the Contemporary Schools of Italy. By A. LADY. Post 8vo. 6s. 6d.
- WROTTESELEY'S (LORD)** Thoughts on Government and Legislation. Post 8vo. 7s. 6d.
- YOUNG'S (DR. THOMAS)** Life and Miscellaneous Works, edited by DEAN FRACOCK and JOHN LEITCH. Portrait and Plates. 4 Vols. 8vo. 15s. each.

SHARDROBT AND STARR, PRINTER, WHITEFRIARS.

005700288

BOUND BY
EDMOND & REMNANTS
LONDON

